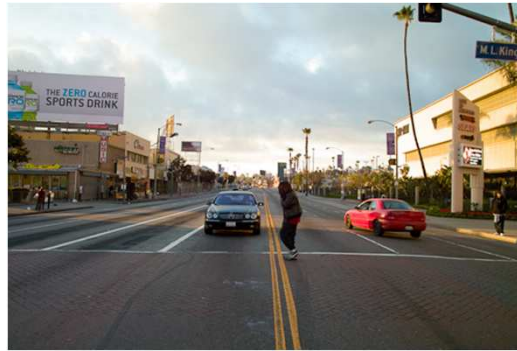


CRENSHAW CORRIDOR TRANSIT LINKAGES PROJECT

CRENSHAW / LAX LIGHT RAIL TRANSIT LINE



Prepared for / Funded by:



LADOT
Moving LA Forward

Prepared by: Los Angeles Urban League
With: Institute for Community Economic Development



Los Angeles Urban League



Institute for Community
Economic Development

Prepared for / Funded by:



LADOT
Moving LA Forward

Prepared by: Los Angeles Urban League
With: Institute for Community Economic Development



Los Angeles Urban League



**Institute for Community
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Dorsey High School

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A special thank you to the staff of CalTrans and LADOT for assisting with the technical aspects of the project.

Congratulations to the CCTLP Youth Leaders for learning new skills and contributing to their community in a positive manner. We are proud of you!

We thank all of the individual volunteers, parents, school officials, and community members for their support of the project. Your honest effort and feedback has enhanced the project.

We look forward to future collaborations.

Introduction

The Crenshaw District is the center of one of the largest transportation infrastructure projects in the County of Los Angeles: the Crenshaw / LAX Light Rail Transit Line (Crenshaw/LAX LRT). The Exposition Light Rail Transit Line (Expo Line) recently opened with two stops that are in direct relation to the LRT. These two stops are : Exposition Boulevard /Crenshaw Boulevard and Exposition Boulevard/Rodeo Road . The new Crenshaw/LAX Light Rail Transit Line (LRT) begins at Crenshaw Boulevard and Exposition Boulevard and travels north-south with a terminus at Los Angeles International Airport (LAX). It is touted as a key economic development project and transit development for City residents. The Crenshaw/LAX LRT has the potential to enhance pedestrian walkability and bicycle access along the Crenshaw Corridor.

There are several community groups and resident activists in the Crenshaw District that have been very active and vocal around land use, jobs, design, and policy decisions relative to the existing Expo Line. Government agencies are also very active in the Crenshaw District with several ongoing and complimentary projects to the Crenshaw /LAX LRT. These include the City of Los Angeles Planning Department's Community Plan Update (Planning), Los Angeles Department of Transportation (LADOT), City of Los Angeles Board of Public Works (BoPW), and the now defunct City of Los Angeles – Community Redevelopment Agency (CRA-LA). These agencies have developed outreach plans and processes within the Crenshaw District and often times collaborate on outreach meetings.

The following report continues the innovation in the community outreach process by involving youth from the local community in the transit planning process. Youth are a large user group of transit in the Crenshaw District. However, their voice is rarely heard, nor is their opinion sought in the process of developing transit systems. This plan process seeks to correct this and produce a replicable youth outreach model while engaging the entire community.

The Crenshaw Corridor Transit Linkages Project (CCTLP) is a project of the Los Angeles Urban League (LAUL) in conjunction with subcontractor Reginald Chapple of the Institute for Community Economic Development (ICED). It is intended to produce a Linkages Plan specifically researched from the perspective of youth age 20 and under with input from adult residents in the Crenshaw District. The Linkages Plan covers three of the future transit stations of the Crenshaw/LAX LRT.

The three stations studied for this project are as follows:

- Exposition Boulevard Station
- King Boulevard Station
- Slauson Avenue Station



There is a lack of adequate pedestrian and bicycle connectivity at each of the stations. Improving non-motorized access will enhance the use of the Crenshaw/LAX LRT Line. The CCTLP Linkages Study will include recommendations and design examples that can be incorporated into the final design of the Metro Crenshaw Corridor transit facilities

There are also recommendations for the “Optional” transit stop at Vernon Avenue/Leimert Park Village. This station has not been approved for an official transit stop at this time. There are plans to build out the underground transit box and leave it ready for finishing once additional transportation funding is identified. This stop is important to the Crenshaw District as Leimert Park Village is the center for African American life in Los Angeles. It hosts festivals, jazz music concerts, a historic theater, a thriving African American commercial district, and is home to radio and television broadcasts related to people of African descent in Los Angeles County.



Map 2- Crenshaw / LAX LRT Line – CCTLP area.

The Plan Process

Outreach and Community Input

Youth Leaders were recruited to learn community outreach and organizing techniques. They completed field work inventories of the built environment with a focus on pedestrian walkability and bike access. They facilitated community-focused and youth-focused design charettes, transit tours, bike tours, researched other U.S. city's transit best practices, and attended community meetings. The community has been involved from the beginning of the plan process with periodic updates given to community leadership groups. Reduced traffic congestion, cleaner air, healthier residents, and a transportation system that is more efficient, equitable, and inclusive of local residents concerns are direct results of focusing on non-motorized access in the Crenshaw District.

Pedestrian and Bicycle Access Plans

The CCLTP recommendations focus on a $\frac{1}{4}$ mile and $\frac{1}{2}$ mile radius surrounding each of the station stops. The radii represent reasonable distances for people to walk and bicycle in the local area. It is realistic for bicyclists to travel further than a $\frac{1}{2}$ mile. Therefore, some recommendations include connections to activity centers outside of the $\frac{1}{2}$ mile radius of each station studied.



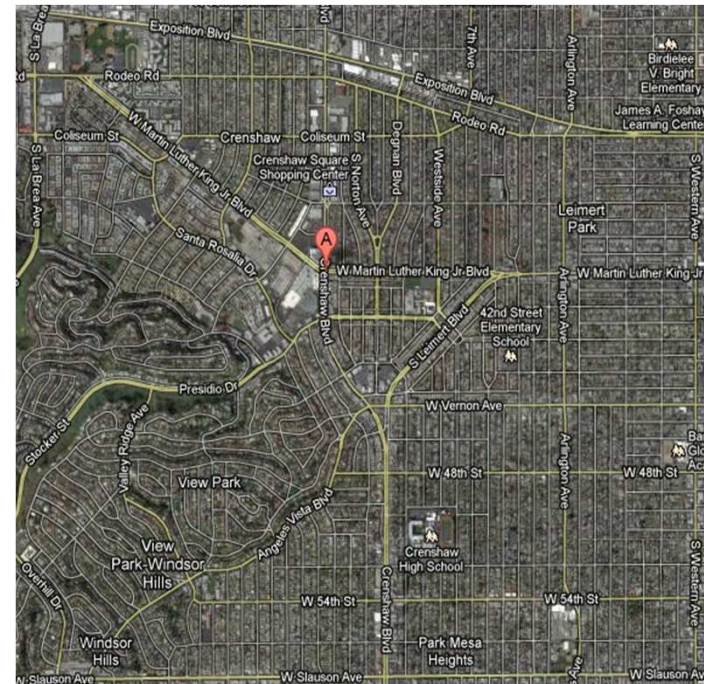
The Project Area

The project area of the Crenshaw Corridor Transit Linkages Project is located in an urban setting. According to 2000 Census Data, the total population is 25,950 people. Households living below the poverty line total 20%. There is a population density of 10,850 per square mile of the 2.5 mile project area. The area's minority population includes a 76.2% African American population. The youth population is 28.6%.

The project area includes a major regional shopping center: the Baldwin Hills Crenshaw Mall, as well as a major cultural node: Leimert Park Village which serves as the center of African American life in Los Angeles. There are also two large public high schools: Crenshaw High School and Dorsey High School; one large middle school: Audubon Middle School; two large charter schools: View Park Preparatory Academies (high school and middle school) and Frederick Douglass Academy.

Crenshaw Boulevard is characterized as a wide boulevard with parallel frontage roads. Crenshaw Boulevard is a major thoroughfare located in Los Angeles County. The portion of the street that runs through the Crenshaw District has been featured in several African American themed movies. Because of this and the large black community in the project area, the name "Crenshaw" is associated with African American cultural life. The area is often referred to as the equivalent of 125th Street in Harlem or Harlem West.

Between the 1920s and through the 1950s the No. 5 Los Angeles Railway "Yellow" Streetcars ran on tracks in the median between Leimert Boulevard to the north and towards Florence Avenue to the south. This Crenshaw/LAX line follows this route, in part. The historic right-of-way offers an opportunity to reinterpret this transportation era through design in the optional Leimert Park/Vernon Avenue stop area.



Map 2- Crenshaw / LAX LRT Line – CCTLP area. Satellite map.



Field Data Collection

CCTLTP Youth Leaders learned survey methods in Saturday classroom sessions at the Los Angeles Urban League. They then travelled via bus to each of the transit stops from the Urban League and collected data at each of the three transit stops to document existing conditions for walking and bicycling and to identify opportunities to improve pedestrian and bicycle facilities. This analysis included pedestrian crossing conditions, on-road bicycling conditions, and potential locations for future greening projects.

CCTLTP were broken into two groups: bicycle access and walkability study groups. They collected data on users, amenities, street furniture, schools / libraries / recreation facilities, activity nodes, commercial/built environment, housing built environment, landmarks, and design.

The Recommendations in this report are based in part on the survey findings.



Crenshaw Corridor Transit Linkage Project Survey Form

CRENSHAW CORRIDOR TRANSIT LINKAGE PROJECT Walkability Study

Name of Data Collector: _____

Date of Data Collection: _____

Transit Intersection (check one): _____ Crenshaw/Slauson
_____ Crenshaw/Leimert Park _____ Crenshaw/King
_____ Crenshaw/Exposition

Subject Area (check one): _____ Users _____ Amenities/Street Furniture
_____ Schools/Libraries/Recreation _____ Activity Nodes
_____ Transit Links

_____ Commercial Built Environment _____
Housing Built Environment _____ Landmarks _____ Design _____
Other: _____

DATA SECTION

Field Notes

Instructions: Note your observations in this section. For example, list the type of street furniture or describe what you see in brief detail or describe people/users. Your field notes are based on the Subject Area checked above. If this area fills up, then continue on a separate sheet of paper.

CRENSHAW CORRIDOR TRANSIT LINKAGE PROJECT DRAWINGS AND MAPPING

Instructions: Draw any items or map the built environment of your subject area. Also, use this area to draw intersections and note key data items. Continue on a separate sheet of paper, if you fill in this space completely. Include a Legend Box of Key Symbols. List any pictures you take in numerical order.

_____ North Arrow. Note which direction is North here.

CRENSHAW CORRIDOR TRANSIT LINKAGE PROJECT Bike Access Plan Study

Name of Data Collector: _____

Date of Data Collection: _____

Transit Intersection (check one): _____ Crenshaw/Slauson
_____ Crenshaw/Leimert Park _____ Crenshaw/King
_____ Crenshaw/Exposition

DATA SECTION

Field Notes

Instructions:

Note your observations in this section. For example, list the type of bicycle street furniture or describe what you see in brief detail or describe people/users. Also, note items that do not exist that would enhance bike access.

Interview Data should be written here.

If this area fills up, then continue on a separate sheet of paper.

CRENSHAW CORRIDOR TRANSIT LINKAGE PROJECT Bike Access Plan Study

DRAWINGS AND MAPPING

Instructions: Draw any items or map the built environment of your subject area. Also, use this area to draw intersections and note key data items. Continue on a separate sheet of paper, if you fill in this space completely. Include a Legend Box of Key Symbols. List any pictures you take in numerical order.

_____ North Arrow. Note which direction is North here.

The Charette Process

Public Outreach

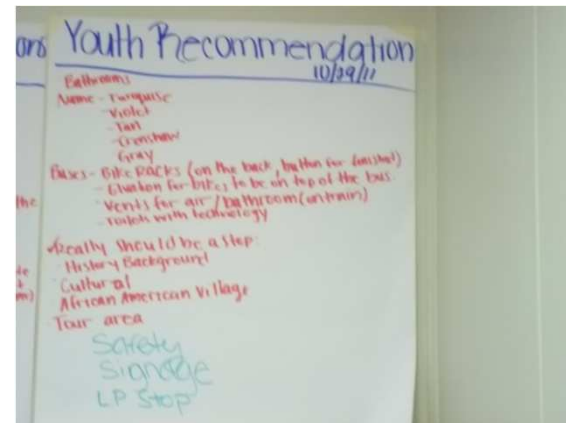
The public outreach component of the CCTLP began with the Project Team composed of the City of Los Angeles – Department of Transportation (DOT), Los Angeles Urban League, and Institute of Community Economic Development presenting to two key stakeholder groups in the Crenshaw District: the Crenshaw Corridor Design Review Board and the Park Mesa Height Community Council. We met with both groups at their regularly scheduled meetings and presented an overview of the project. The groups provided feedback on the project and took applications to distribute to youth in their spheres of influence.

Charrettes

The CCTLP held two design charrettes in the Crenshaw District to get input from three specific stakeholder groups: Youth, Community Leaders, and Adults.

The Youth Charrette was held on October 29, 2011. Over 20 youth participated in the first charrette. CCTLP Youth Leaders facilitated the opening session and each of the breakout sessions. Participants broke out into three tables and came up with design ideas for the three CCTLP transit stops and the optional Leimert Park/Vernon Avenue stop using toy cars, miniature city elements, blocks, markers and butcher papers. During the final report out, Youth Leaders captured the recommendations of the participating youth. All youth filled out a pre-survey and a post-survey to measure what they learned and capture their attitudes about transit in the Crenshaw District.

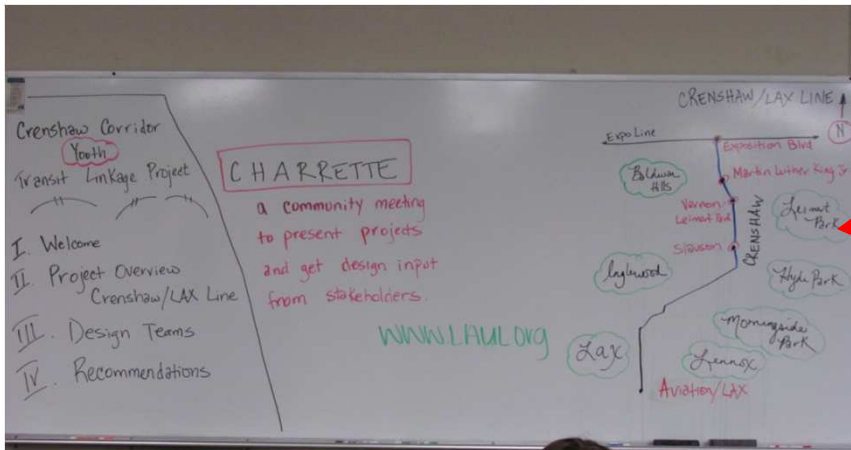
The Community Charrette was held on November 19, 2011. Twenty adults attended. Several of the adults were from the Stakeholders meetings held earlier in the project life cycle. The agenda followed the same as the Youth Charrette.





Community Groups work on Design Charette Recommendations.





Youth Leaders write each group's recommendations.

The Plan

Definitions

- Walkability
 - Ability to travel using your feet in a home school or business environment that is safe, has clear signage, and connects you to transportation easily (car, bike, bus, train)
- Bike Access
 - Clearly defined bike lanes in streets with clear signage that protects riders, drivers, and pedestrians
 - Access to storage, portable devices (racks on buses), and bike maintenance equipment (air pumps)

Slauson Avenue / Crenshaw Boulevard INTERSECTION

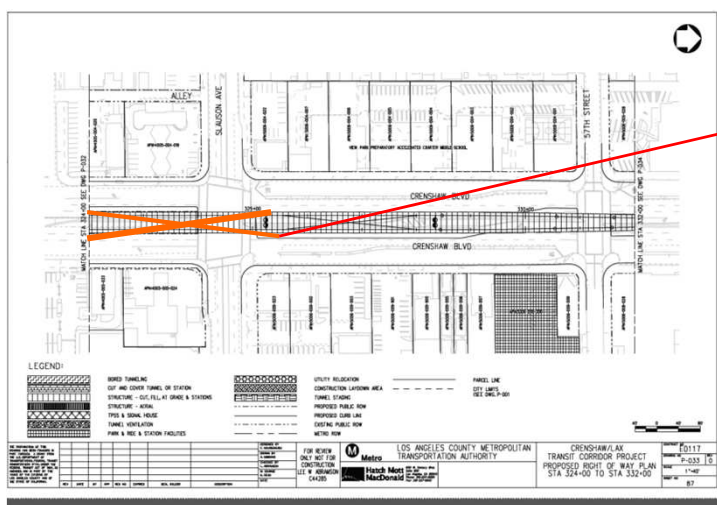


Slauson Avenue Station

The Slauson Avenue (Slauson) Station will be located at-grade in the center median of Crenshaw Boulevard south of Slauson Avenue (see Map Below). It is 1.68 miles from the King Boulevard Station. The at-grade station poses several pedestrian and bicycle access issues for the intersection.

The Slauson Station is within a medium density urban area of the Crenshaw District. There are numerous activity centers surrounding the station. Major activity centers include State of California Employment Development Department, Crenshaw High School, the Crenshaw Plaza Mini Mall, View Park Library, View Park Accelerated Preparatory Middle School, View Park Accelerated Preparatory High School, St. John Catholic Church and School, and West Angeles Community Development Corporation Office and Senior Development.

Walkability and bicycle access inventory fieldwork identified constraints. For bicyclists, there are no paved bike lanes or bicycle facilities, a lack of height appropriate wayfinding devices, the need for reflective lane markers, and poor roadway conditions. Pedestrian concerns include lack of painted high visibility crosswalks, the need for countdown signals at intersections, more covered/lighted bus shelters, consistent street furniture, appropriate street lighting, and school crossings lack appropriate signals and crosswalk markings.



Source: Final EIR Crenshaw LAX Line - Part 3 of 7 Engineering Drawings



Map 3- Crenshaw / LAX LRT Line - Slauson Avenue Station..

Slauson Avenue Station

Activity Centers

The neighborhoods within a 1/4 mile and 1/2 mile radius of the Slauson Avenue Station is home to robust activity centers with numerous governmental, schools, shopping districts, cultural centers and non-profit organizations represented.



View Park Prep Middle School



View Park Library



Global beat multi-cultural Center – Jamaican Community



Employment Development Department



View Park Prep High School



West Angeles Community Development Corporation Office Senior Housing Development



Proposed – Fresh n Easy Market



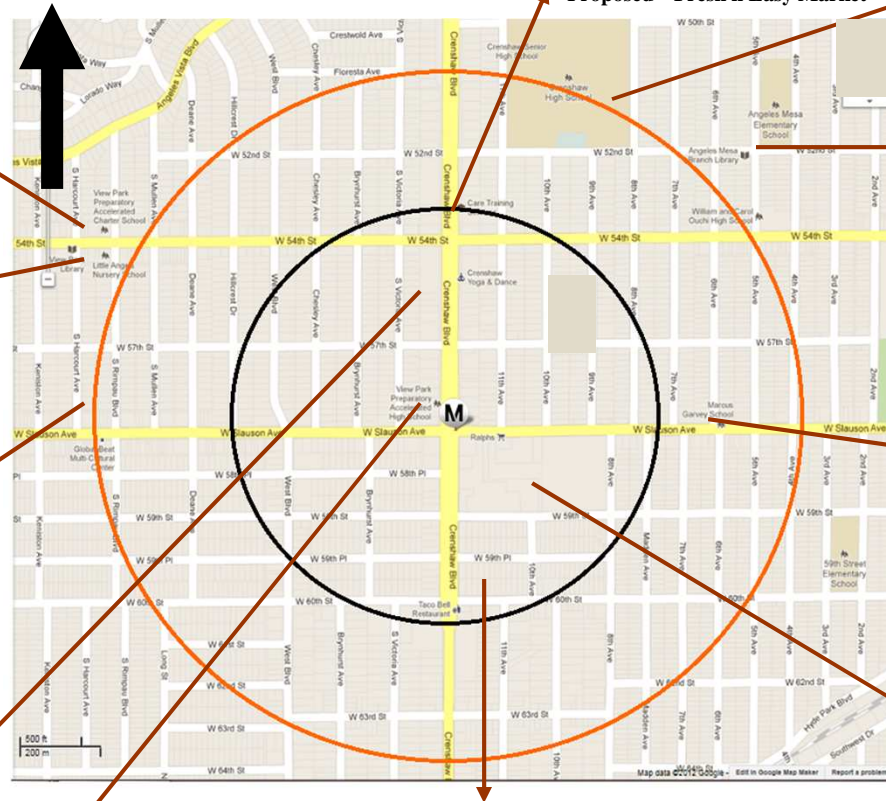
Crenshaw High School



Angeles Mesa Branch Library / School



Marcus Garvey School



Slauson Avenue Station

Recommended Improvements

Slauson Bike Lanes Rec. 1.1

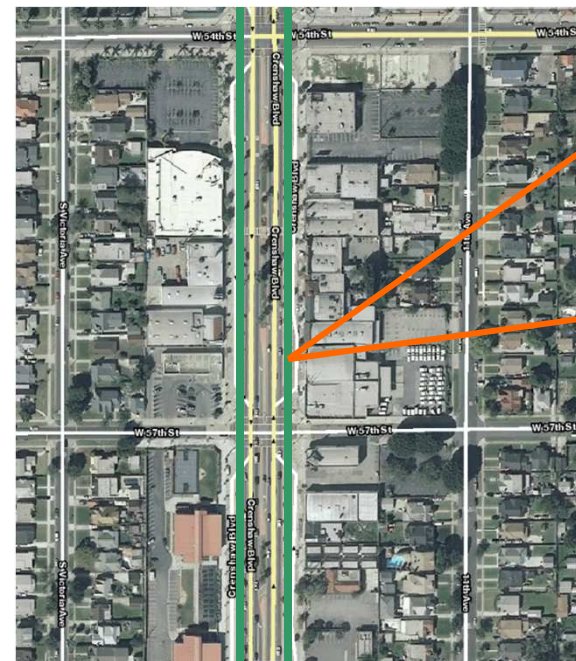
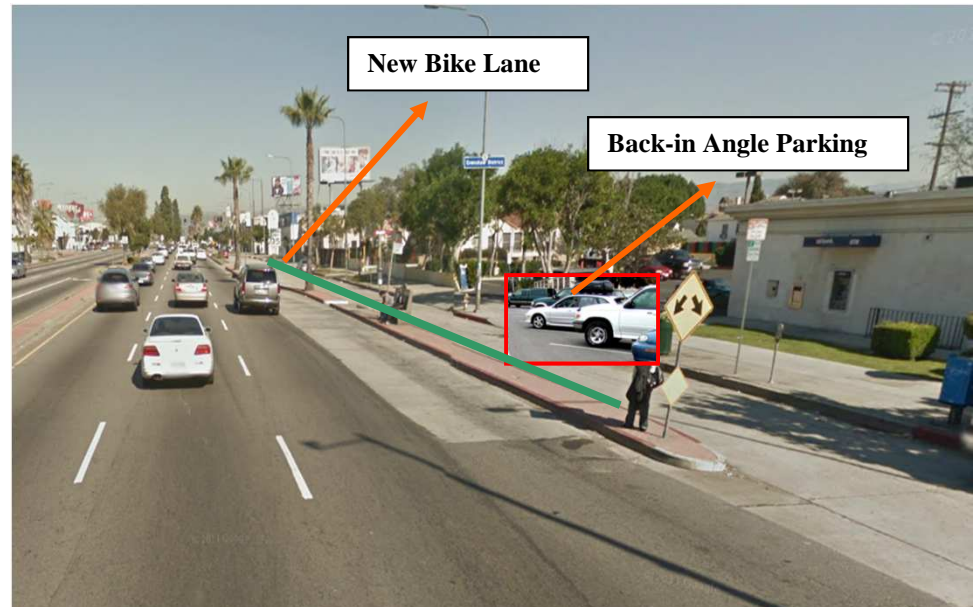
Bike Lanes on Crenshaw Boulevard and Slauson Avenue Intersection

Description and Issues

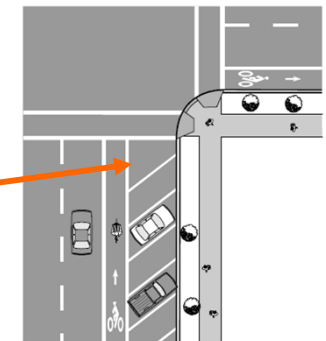
Crenshaw Boulevard is a high volume, six-lane arterial highway with a center left turn lane. It has an average of 36,000 vehicles per day (VPD) and serves as the primary north-south connector for traffic in the Crenshaw District. Crenshaw Boulevard serves as the spine for the Crenshaw/LAX line with an at-grade platform on the south side of Slauson Avenue on Crenshaw Boulevard. Currently, there are no defined bike lanes on Crenshaw Boulevard or Slauson Avenue within the half-mile radius of the proposed Slauson Avenue Station of the Crenshaw/LAX LRT Line.

Recommended Improvements

- Install striped bicycle lanes on Crenshaw Boulevard with reflective white paint.
- Locate Crenshaw Bicycle Lane inside of the turn-in median buffer separating commercial district parking from vehicular traffic. Transform vehicular parking from at-curb parking to back-in angle parking to improve safety for Bicyclists with coordination from LADOT.
- Connect new bike lanes to new bike lanes at King Boulevard Station. Coordinate with LADOT as the Crenshaw/LAX line is in a tunnel from Exposition Boulevard (north) to 48th Street. (south).
- Bike lanes should be installed where the Crenshaw/LAX LRT line runs above ground.



New Bike Lane



Slauson Avenue Station

Recommended Improvements

Slauson Bike Lanes Rec. 1.2

Bike Lanes on Slauson Avenue and Collector Streets within the ½ mile radius of the station

Description and Issues

Slauson Avenue is a high-volume two-lane highway with a center left turn lane. It averages 27,000 VPD and serves as a major east-west arterial highway connector for the Crenshaw District.

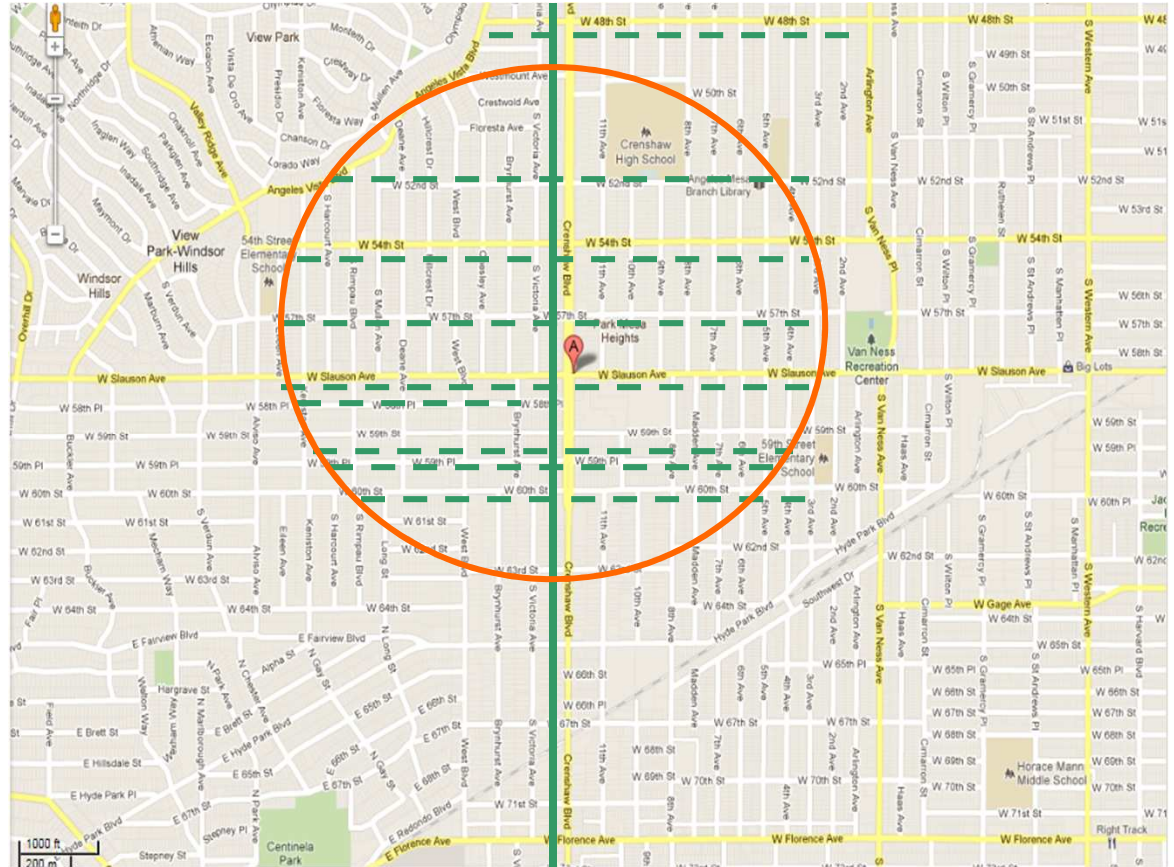
Currently, there are no defined bike lanes on Slauson Avenue within the half-mile radius of the proposed Slauson Avenue Station of the Crenshaw/LAX LRT Line. Any improvement must be coordinated with LADOT due to the limited roadway.

Slauson Avenue as well as the other major collector roads within a 1/2-mile radius of the Slauson Station should connect to the Crenshaw Boulevard bike lane through defined bike paths. The presence of schools on these collector roads makes the creation of bike lanes on these streets ideal.

There is limited roadway width along Crenshaw Boulevard that may make implementation difficult. Parking or through lanes will be impacted by installing bike lanes

Recommended Improvements

- Install striped bicycle lanes on Slauson Avenue with reflective white paint.
- Locate Slauson Avenue Bicycle Lane adjacent to the parking curb. Connect new bike lanes to new bike lanes at King Boulevard Station.
- Create Bike Lanes that intersect with the Slauson Avenue bike lane along 48th Street, 52nd Street, 54th Street, 57th Street, 58th Street, 59th Street, 59th Place, 60th Street, and 63rd Street.
- Widen Crenshaw Boulevard and Slauson Avenue to accommodate bike lanes where necessary and .



Slauson Avenue Station

Recommended Improvements

Slauson Bike Lanes Rec. 1.3

Bike Lanes , Bike Blvd. around Crenshaw High School

Description and Issues

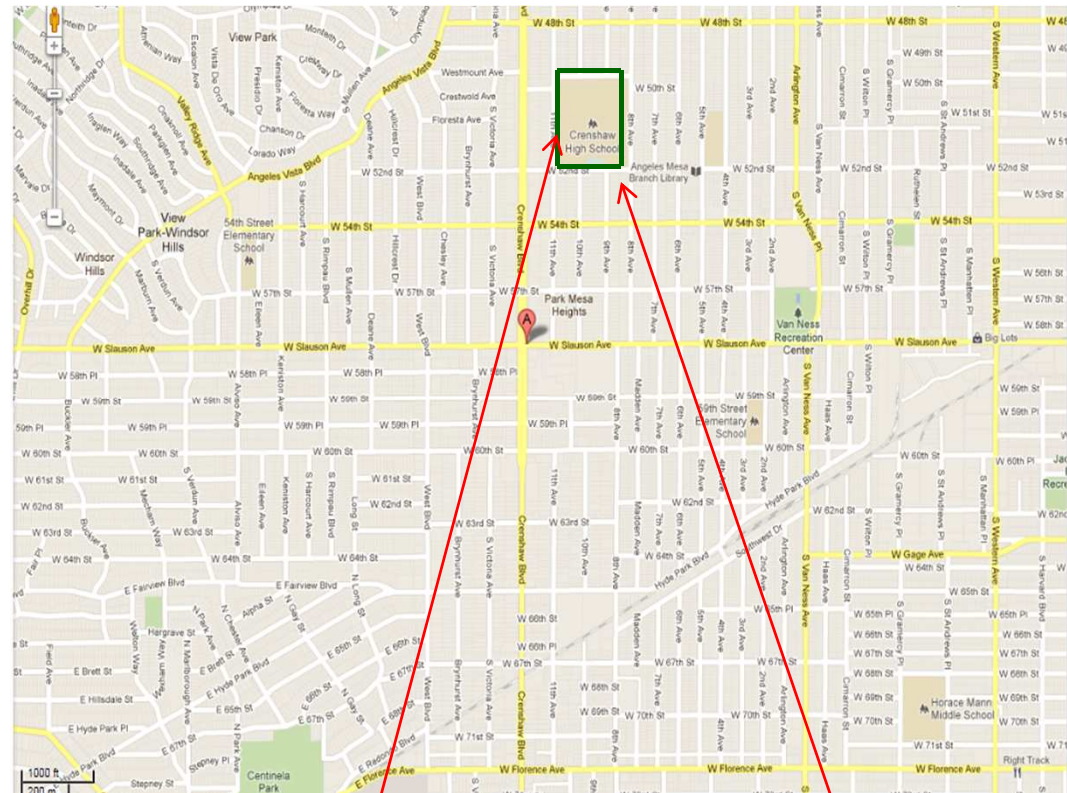
Crenshaw High School is a large high school in the Slauson Station area. It enrolls 2600 students per year. The school boasts a title winning basketball and football team. On-campus facilities include agricultural gardens, tennis courts, football /track stadium, adult school, magnet program and music wing. It is a center of community activity located at 5010 11th Avenue – just one block west of Crenshaw Boulevard between 52nd Avenue and 48th Street.

The school's main rival is Susan Miller Dorsey High School. Dorsey H.S. is located in the Exposition / Farmdale Station ½ mile radius.

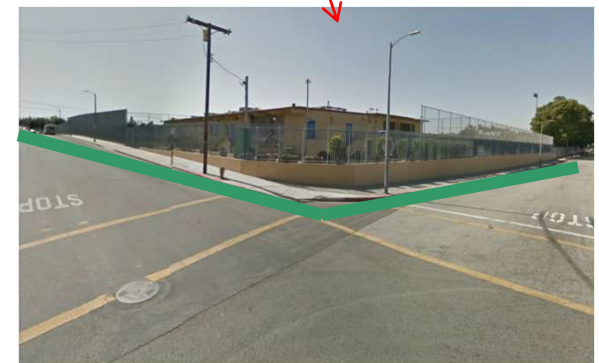
Given the numerous activities at the school, bicycle lanes should be installed around the school to provide bicyclists with a safe and efficient pathway to navigate to the school and around the school.

Recommended Improvements

- Install striped bicycle lanes on 11th Avenue, 50th Street, and 8th Avenue with reflective white paint.
- Install a bicycle friendly street on 11th Avenue - the front of the school -- to share traffic lanes with cars and buses that pick-up and drop-off in this location. Green sharrow lane is recommended.



Looking north on 11th Avenue from 52nd Street



8th Avenue and 52nd Street -

Slauson Avenue Station

Recommended Improvements

Slauson Bike Lanes Rec. 1.4

Install Bicycle Box at Slauson Avenue and Crenshaw Avenue crosswalks to aid in the flow of bicycle traffic.

Description and Issues

Bicyclists at the intersection of Slauson Avenue and Crenshaw Boulevard will have to compete with fast-moving, high-volumes of traffic. They need a headstart on traffic in order to successfully navigate with the flow of motorized traffic and avoid pedestrians.

Installing a bicycle box in the left turn lane area of each crosswalk will give them a chance to move ahead of traffic when the light changes.

Bicycle boxes provide additional space for bicyclists to move to the front of the vehicular queue while waiting for a green light.

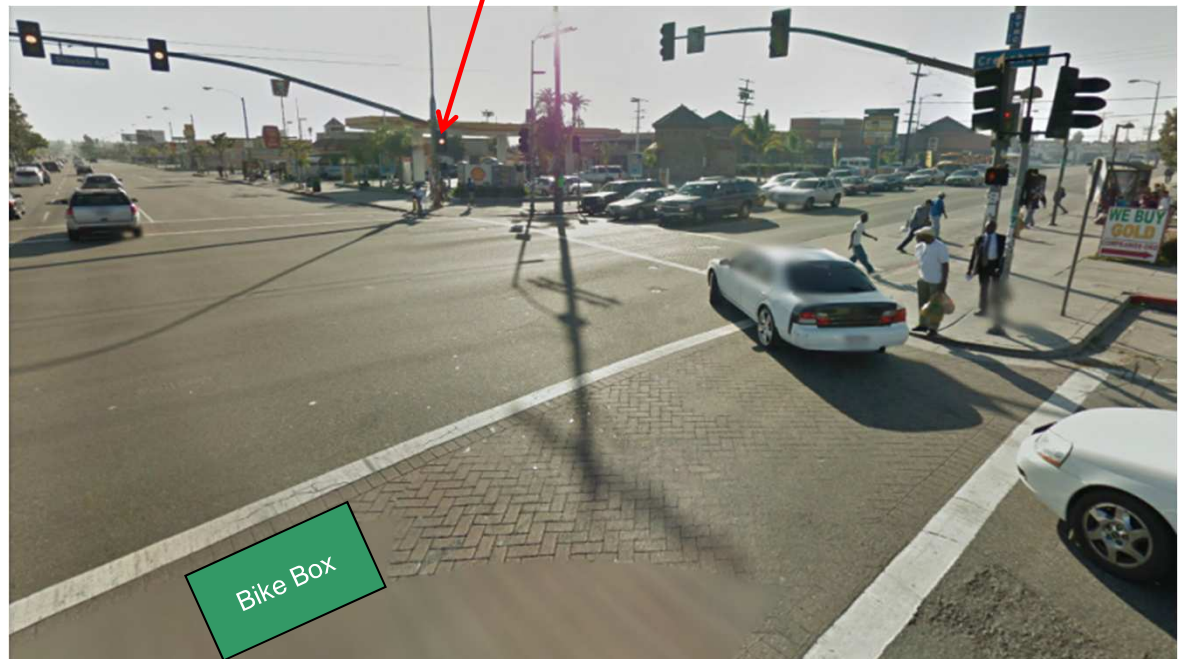
Bicycle boxes are an experimental treatment that requires Federal Highway Administration (FHWA) and California Transportation Commission (CTC) approval.

Recommended Improvements

- Install bicycle boxes at the Slauson Avenue and Crenshaw Boulevard intersection.
- Install Bicycle Signal to allow them to move ahead of traffic.



Crosswalk signal with bicycle light.



Install Bike Lane - Bike Box at Crenshaw and Slauson / Traffic lights should have a 4 sec. delay for cars giving Bikers time to cross. Bike box is ideal for the left turn lane.

Slauson Avenue Station

Recommended Improvements

Slauson Bike Signage and Wayfinding Rec. 2.1

Bike Signage and Wayfinding Signage in conjunction with new Bike Lanes.

Description and Issues

Bicycle Lanes around the Slauson Station area roadways should be designated for the exclusive use of bicycles. Bicycle Lane markings increase a bicyclist's confidence that motorists will not stray into their travel paths. Equally, signage makes it less likely that motorists will swerve left out of their lane to avoid bicyclists sharing the road on their right.

Wayfinding devices assist bicyclists by alerting them to connecting bike lanes, bike paths and bicycle boulevards. They also alert bicyclists to potential dangers. Wayfinding signage in the Slauson Station area should be treated like freeway signage alerting bicyclists to the direction of and distance to main boulevards, LRT stations, and activity centers.

The consistent use of street signage will create a natural rhythm that bicyclists and motorists will begin to rely upon to inform them of each other and maintain the safety of motorists and bicyclists.

Recommended Improvements

- Install consistent way finding signage.
- Create Bike Route Signage with Distance Markers.
- Place No Parking Signage at intervals along bike lanes to discourage motorist obstructing bike lanes. These should specifically be installed at locations where no designated parking exists.



Slauson Avenue Station

Recommended Improvements

Slauson Bike Signage and Wayfinding Rec. 2.2

Bike Signage and Wayfinding Signage Height.

Description and Issues

Bicycle signage and wayfinding devices are typically posted for motorized vehicles to read and adjust their driving based on the presence of bicycle traffic. However, signage for bicyclists are also posted at the same level. This poses a challenge for bicyclists whose line of sight is at a different angle from motorists.

All Bicycle Lane signage around the Slauson Station area roadways should be posted at one standard height for motorized vehicles. Bicycle signs for bicyclists should be posted at a lower height to encourage them to use them as wayfinding and safety devices. This will also prevent them from shifting their line of sight from the road area thus preventing possible accidents.

While the California Manual on Uniform Traffic Devices (CA-MUTD) mandates sign color, an effort should be made to provide consistency that does not confuse the bicyclist. Similarly, while the Los Angeles County Manual of Policies and Procedures (MPP) dictates sign height, efforts should be made to provide signage that is eye appropriate for bicyclists.

Recommended Improvements

- Install signage for bicyclists and wayfinding devices at a height slightly lower than those designated for motorized vehicles.
- Avoid cluttering signs together so that messaging does not compete.
- Post No Parking Signs with Bike Signage.



Avoid Visual Clutter



Bike Signage for Motorists .



Signage at Bicyclists Height
Possible consistent green color for Bicyclists.



Bike Lane Sign with No Parking Sign.

Slauson Avenue Station

Recommended Improvements

Slauson Bike Facilities and Storage Rec. 3.1

Bike Parking Facilities and Bicycle Storage co-located at existing City-Owned Parking Lot at 54th Street and 11th Avenue.

Description and Issues

Bicycle facilities will be a new installation in the Slauson Station area. Local residents are used to using City Owned parking lots for parking motorized vehicles. Similar parking areas should be located in the area for bicycles.

There is an opportunity to co-locate bicycle parking facilities at City-Owned Parking lots. This would encourage people to “Park-Bike-Ride” or “Bike-Park-Ride”.

For example, the parking lot pictured right is located on separate property in the rear of the Los Angeles Urban League’s Milken Youth Center, Media Center and Workforce Development Center (54th Street and Crenshaw Boulevard.) There is an easement that allows pedestrians and bicycle traffic to move between the parking property and the Los Angeles Urban League.

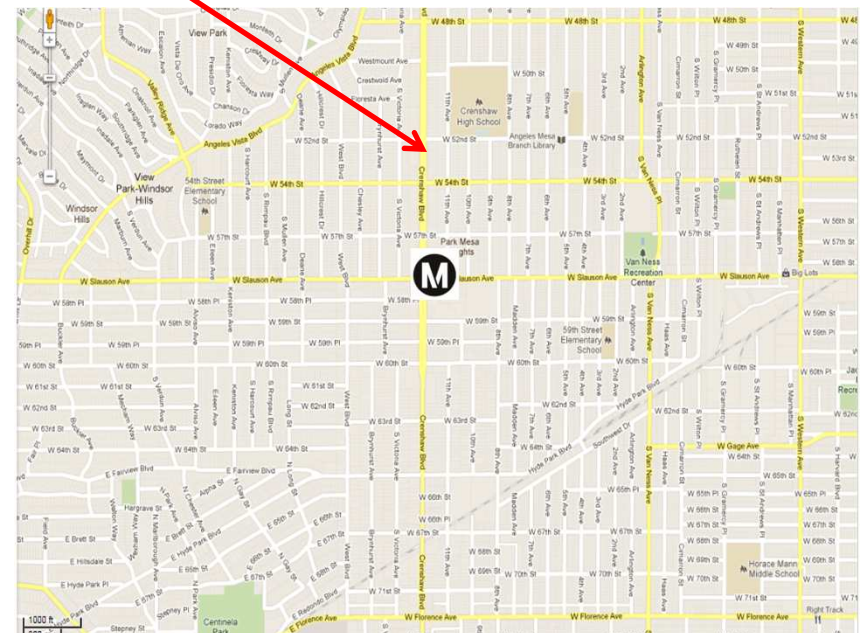
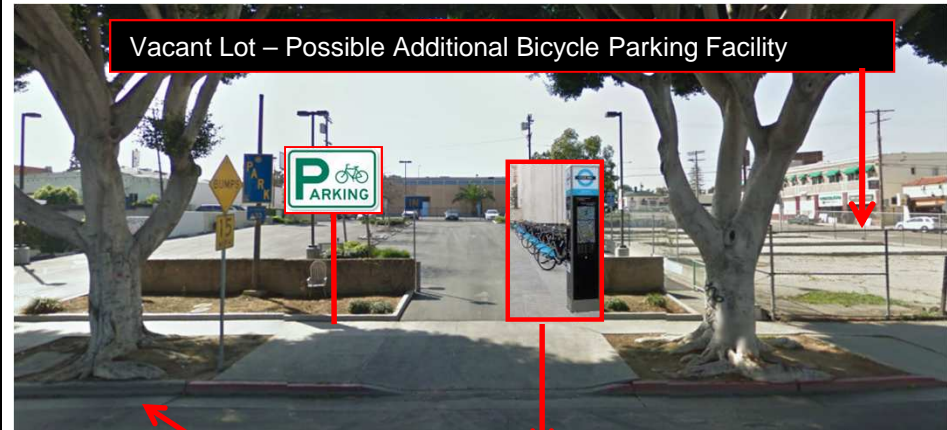
The pictured parking lot is located on the southwest corner of 54th Street and 11th Avenue. Crenshaw High School is located at the northeast corner of 54th Street and 11th Avenue. Therefore, it is feasible for Crenshaw High School students to park their bicycles at this location and cross the street to school.

Additional bicycle parking and facilities could be achieved through the purchase of the adjacent vacant lot next to the City-owned parking lot.

The parking lot is three blocks south of the at-grade Slauson Avenue Station Crenshaw Boulevard and Slauson Avenue.

Recommended Improvements

- Install bicycle parking facility at 54th Street & 11th Avenue City-owned parking lot.
- Purchase adjacent lot at 54th Street between Crenshaw Blvd and 11th Avenue for additional Bicycle Parking Facility.



Slauson Avenue Station

Recommended Improvements

Slauson Bike Facilities and Storage Rec. 3.2

Make Slauson Station Area Bicycle Facilities “Full-Service” with Innovative Designs.

Description and Issues

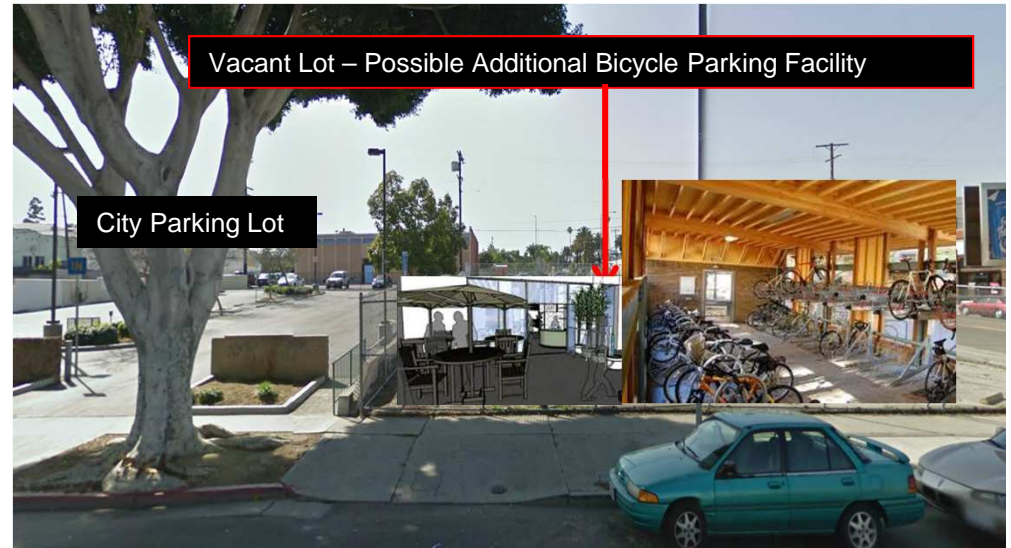
Bicycle facilities including storage and parking in the Slauson Station Area could take on an innovative look in order to attract users to the facilities.

Possible facilities at the Bicycle Parking Facility include:

- Air Pumps and Tire Repair Services
- Bike parking racks.
- Bike storage containers.
- Bicycle equipment purchase.
- Concession stand with water and refreshments.
- Maps for the Slauson Station Area and Crenshaw/LAX Line.

Recommended Improvements

- Install bicycle parking facility at 54th Street & 11th Avenue City-owned parking lot.
- Install innovatively designed storage and parking facility with services for bicyclists and bicycles.
- It is anticipated that this location will be a heavy bicycle area due to the number of schools, social service, and government offices.



Example of bike storage lockers.



Example of bicycle pump station.

Slauson Avenue Station

Recommended Improvements

Slauson Station Bike Safety Rec. 4.1

Install Smart Crosswalks at high-volume crossing areas that have a history of pedestrian accidents – these crossings may pose the same dangers for bicyclist walking bikes across the street.

Description and Issues

11th Avenue is a popular residential street in the Crenshaw District. It is located one block east of Crenshaw Boulevard. There are two important Activity Centers located on 11th Avenue:

1. Crenshaw High School neighborhood – located on 11th Avenue between 54th Street south and 50th Street north.
2. Slauson Plaza Shopping Center – with an entrance on 11th Avenue off Slauson, it is located between Crenshaw Boulevard (west) and 10th Avenue (east).

The Slauson Avenue and 11th Avenue crosswalk was the site of a pedestrian fatality involving a Crenshaw High School student crossing the street when it was unmarked. Crenshaw High School students advocated for a high visibility crosswalk to be installed. However, due to the high volume of traffic at these crossing additional safety measures need to be installed to ensure the safety of bicyclists and pedestrians. One possible solution is the installation of Smart Crosswalks with flashing lights that alert motorists to slow down. Additional crosswalk signals and buttons should be installed for bicyclists at these crossings, as well.

Recommended Improvements

- Install Smart Crosswalks at high volume intersections along 11th Avenue from Slauson Avenue to 48th Street.
- Install bicycle crossing signage and crossing signals to alert bicyclists to share the crosswalks with pedestrians. Coordinate safety concerns with California Public Utilities Commission (CPUC).
- Complete the installation of a traffic signal at Slauson Avenue and 11th Avenue.



Example of Smart Crosswalk to be installed in Slauson Station Area



54th Street and 11th Avenue crosswalk looking northeast towards Crenshaw High School.



Slauson Avenue (looking east) and 11th Avenue – site of pedestrian fatality for Crenshaw High School Student near future Slauson Station Area

Slauson Avenue Station

Recommended Improvements

Slauson Station Walkability – Intersections Rec.

1.1

Install Pedestrian Refuge in Crosswalks at the intersection of Slauson Avenue and Crenshaw Boulevards to assist pedestrians with crossing and keep them safe from motorized traffic.

Description and Issues

Slauson Avenue and Crenshaw Boulevard have a high volume of traffic that moves very fast. There are a variety of pedestrians that use the crosswalks at this intersection including seniors, school children, adults, and families with children. Some of these users move slower than the timed crosswalk light and will need protection from traffic should they not be able to make it all the way across the street during the traffic signal.

Pedestrian refuges should be installed in the crosswalks at the Slauson Avenue and Crenshaw Boulevard intersection and the signalized intersections within the ½ mile radius to provide a safe waiting area for pedestrians.

Pedestrian refuge signage should also be installed.

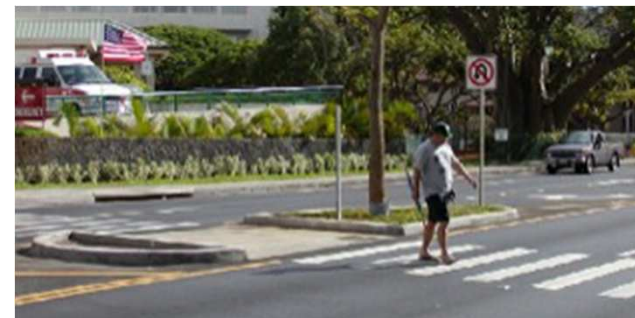
It will be necessary to coordinate with the California Public Utilities Commission (CPUC) regarding the safety concerns and implementation.

Recommended Improvements

- Install pedestrian refuges at the center of each crosswalk.
- Replace any bulb-out with a flat pedestrian refuge to aid seniors, baby strollers and the disabled to wait in these locations.
- Install pedestrian refuge signage.
- Install pedestrian countdown crosswalk signals at existing signalized intersections.



Slauson Avenue at 57th Street – with new yellow pedestrian refuge island area.



Slauson Avenue Station

Recommended Improvements

Slauson Station Walkability – Intersections Rec. 1.2

Install High Visibility Crosswalks on all collector streets and at the intersection of Slauson Avenue and Crenshaw Boulevard.

Description and Issues

Slauson Avenue and Crenshaw Boulevard crosswalks and other crosswalks within the ½ mile radius of the station have been worn down due to the high volume of pedestrian and motorized traffic. Stamped asphalt designs are poorly maintained. High visibility white crosswalk lines are often dingy and/or worn down thus diminishing their effectiveness. Some crosswalks on the collector streets of 57th Street 54th Street, 52nd Street, and 48th Street lack high visibility crosswalks markings at activity centers and in the residential community.

Slauson Avenue and Crenshaw Boulevard signalized intersections should have high visibility crosswalks installed and maintained.

Collector streets – 54th Street, in particular, should have high visibility crosswalks installed and maintained due to many of them containing significant activity centers within the ½ mile radius of the station.

It is understood that portions of this area are in the City of Los Angeles, while others are in unincorporated County of Los Angeles boundaries. Thus, improvements would have to be coordinated between the two municipalities.

Recommended Improvements

- Install and maintain high visibility crosswalks on signalized intersections and collector streets with significant activity centers.

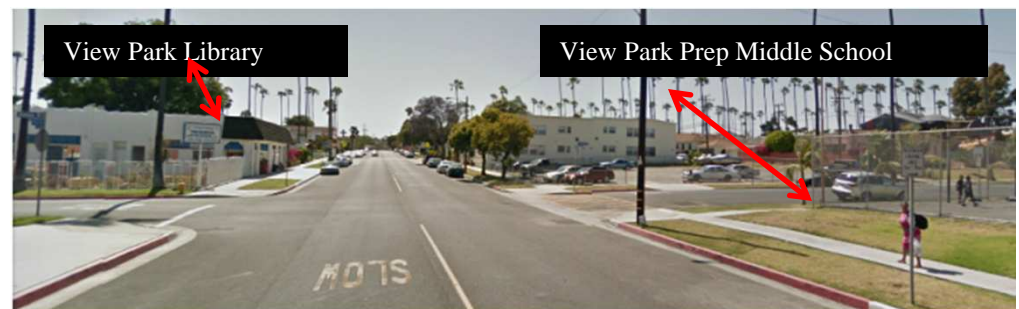
Cost Estimate:



High visibility markings and stamped asphalt should be installed and maintained.



Example of possible non-signalized high visibility markings in crosswalks --Slauson Station Area



Example of limited high visibility crosswalk at intersection of 54th Street between Rimpau Avenue and Harcourt Avenue. Location has the View Park Library and View Park Prep Middle School located on the corners.

Slauson Avenue Station

Recommended Improvements

Slauson Station Walkability – Street Furniture Rec. 2.1

Install street furniture that enhances the pedestrian and transit experience. Avoid street furniture that impedes the ability of pedestrians to use sidewalks.

Description and Issues

Slauson Avenue and Crenshaw Boulevard have vibrant commercial districts with wide sidewalks for pedestrians to walk, shop, and wait for bus transportation.

However, some of the street furniture and amenities do not enhance the pedestrian experience – they actually detract and discourage pedestrians to fully explore the corridors.

Examples include the following: overflowing trashcans, businesses with advertising horses in the middle of the sidewalk, bus benches that have no shelter or lighting, heavily soiled sidewalks, graffiti and the lack of shade trees.

Street furniture should be installed and maintained that enhances the pedestrian experience and does not compete with them or impede them from walking.

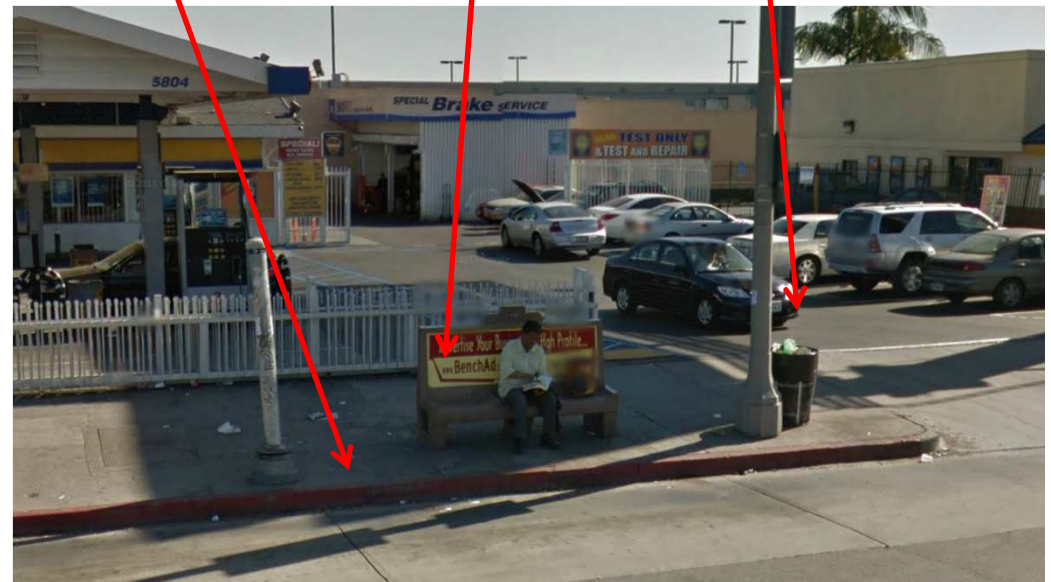
Recommended Improvements

- Install and maintain street furniture that enhances the pedestrian experience.
- Hire a youth-focused graffiti clean-up and sidewalk cleaning team to maintain the sidewalks.
- Install covered bus benches with solar lighting.
- Plant shade trees requiring low-maintenance and minimal water.



Sidewalk condition on northeast corner of Crenshaw Bl. and 48th Street.

Trash and heavily soiled crosswalk. Uncovered bus bench. Full Trash – No recycling bins.



Southeast corner of Crenshaw Boulevard at Slauson Avenue in front of Arco Station/Slauson Shopping Plaza.



Slauson Avenue Station

Recommended Improvements

Slauson Station Walkability – Signage/Wayfinding Rec. 3.1

Install wayfinding signs that point out pedestrian paths/routes to the Slauson Station

Description and Issues

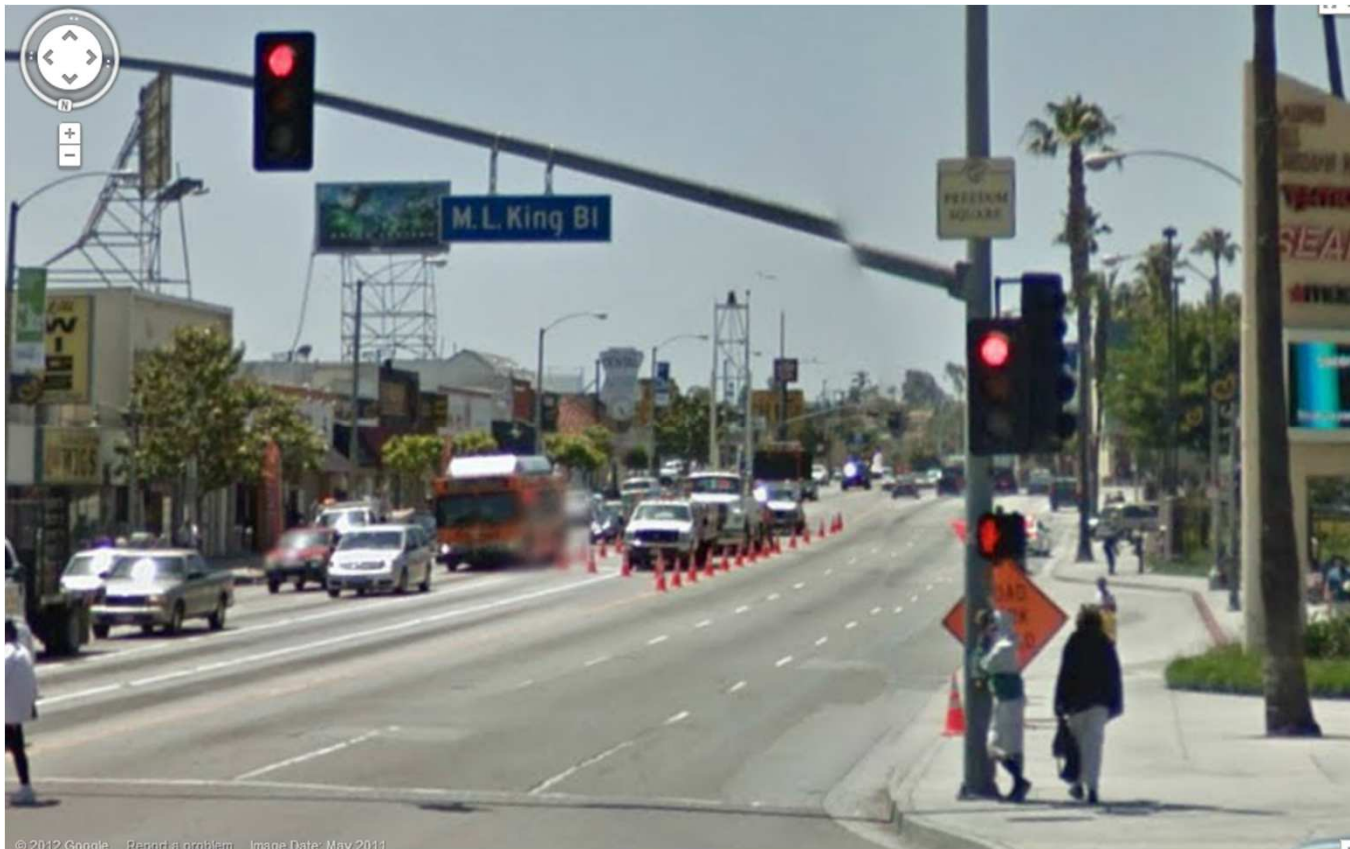
The area around the Slauson Station has numerous numerous streets and activity centers. Wayfinding signage should be installed to direct pedestrians to the Slauson Station using arrows and mileage numbers. The signage could serve as a unifying signage system that incorporates signage for bicyclists and pedestrians.

Recommended Improvements

- Install pedestrian route signage along Slauson Avenue, Crenshaw Boulevard, and collector streets that will direct pedestrians to the Slauson Station.



King Boulevard / Crenshaw Boulevard INTERSECTION

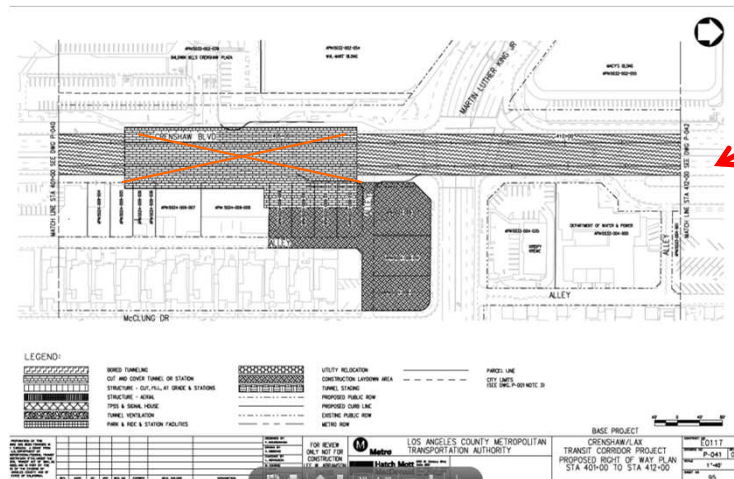


King Boulevard Station

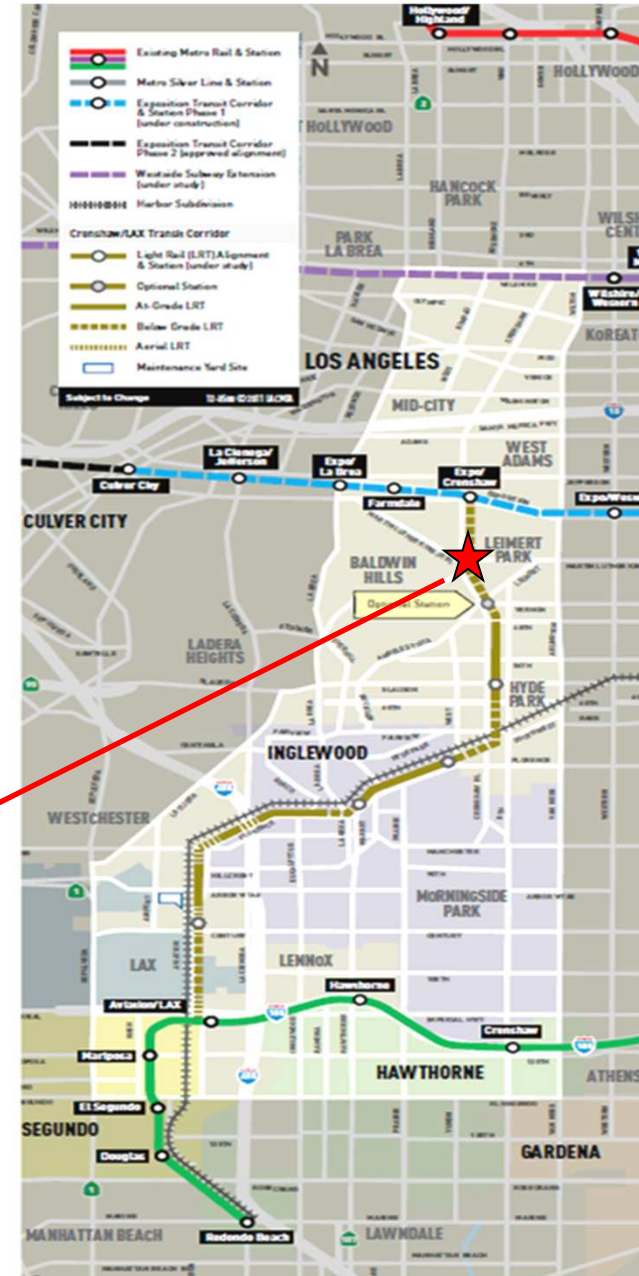
The Martin Luther King Jr. Boulevard (King) Station will be located below-grade in the center of Crenshaw Boulevard south of Exposition Boulevard Station (see Map Below). It is 1.15 miles from the Exposition Boulevard Station to the north and 1.6 miles from the Slauson Station to the south. It is .6 miles from the optional Vernon Station at Leimert Park Village. The below-grade station poses several pedestrian and bicycle access issues for the intersection.

The King Station is within a medium density urban area of the Crenshaw District. There are numerous activity centers surrounding the station. Major activity centers include State of California Department of Water and Power, the Crenshaw Plaza Mall, the Rave Cinemas 15, One United Bank, First Choice Driving School, Audubon Middle School, Museum of African American Art, UCLA Center For Community Partnership, Crenshaw Medical Arts Center, and numerous educational centers. Dorsey High School is located just outside of the northwest quadrant of the ½ mile radius but is included in the recommendations because of its proximity. Also, the high-density multi-family community of Baldwin Vista is partially included in the radius map and is considered in the recommendations.

Walkability and bicycle access inventory fieldwork identified constraints. For bicyclists, there are no paved bike lanes or bicycle facilities, a lack of height appropriate wayfinding devices, the need for reflective lane markers, and poor roadway conditions. Pedestrian concerns include lack of painted high visibility crosswalks, the need for countdown signals at intersections, more covered/lighted bus shelters, consistent street furniture, appropriate street lighting, and school crossings lack appropriate signals and crosswalk markings.



Source: Final EIR Crenshaw LAX Line - Part 3 of 7 Engineering Drawings



Map 4- Crenshaw / LAX LRT Line - King Boulevard Station

King Boulevard Station

Activity Centers

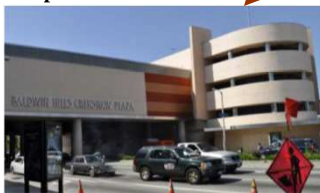
The neighborhoods within a 1/4 mile and 1/2 mile radius of the King Blvd. Station is home to robust activity centers with numerous governmental, schools, shopping districts, cultural centers and non-profit organizations represented.



Crenshaw Medical Arts Center



UCLA Center For Community Partnerships



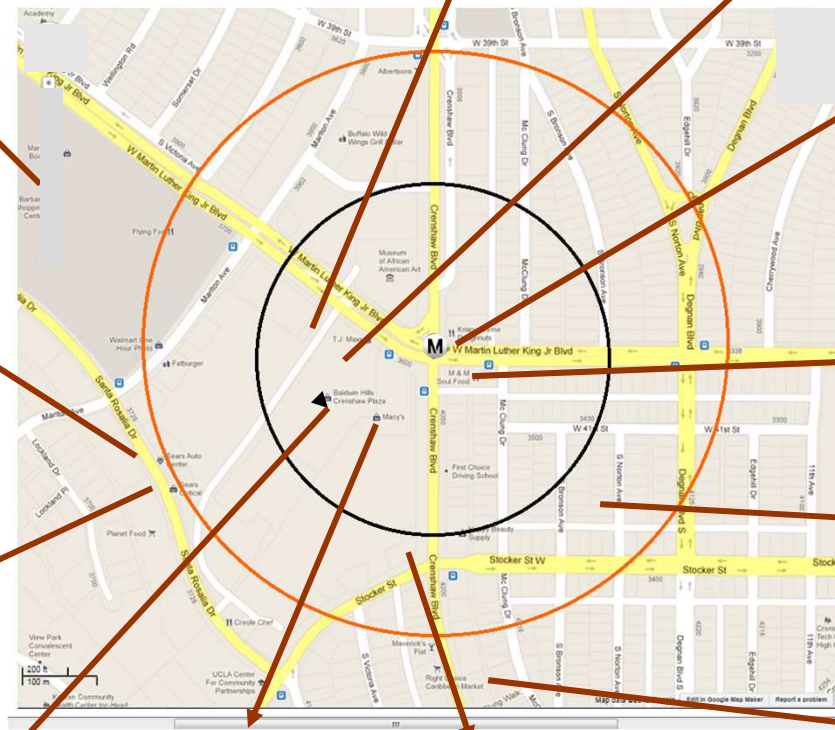
Baldwin Hills Crenshaw Plaza



Macy's



One United Bank



Department of Water and Power



Audubon Middle School



Right Choice Caribbean Market

King Boulevard Station

Recommended Improvements

King Bike Lanes Rec. 1.1

Install bike lanes on Crenshaw Boulevard that connects to the Exposition Station and Slauson Avenue Station.

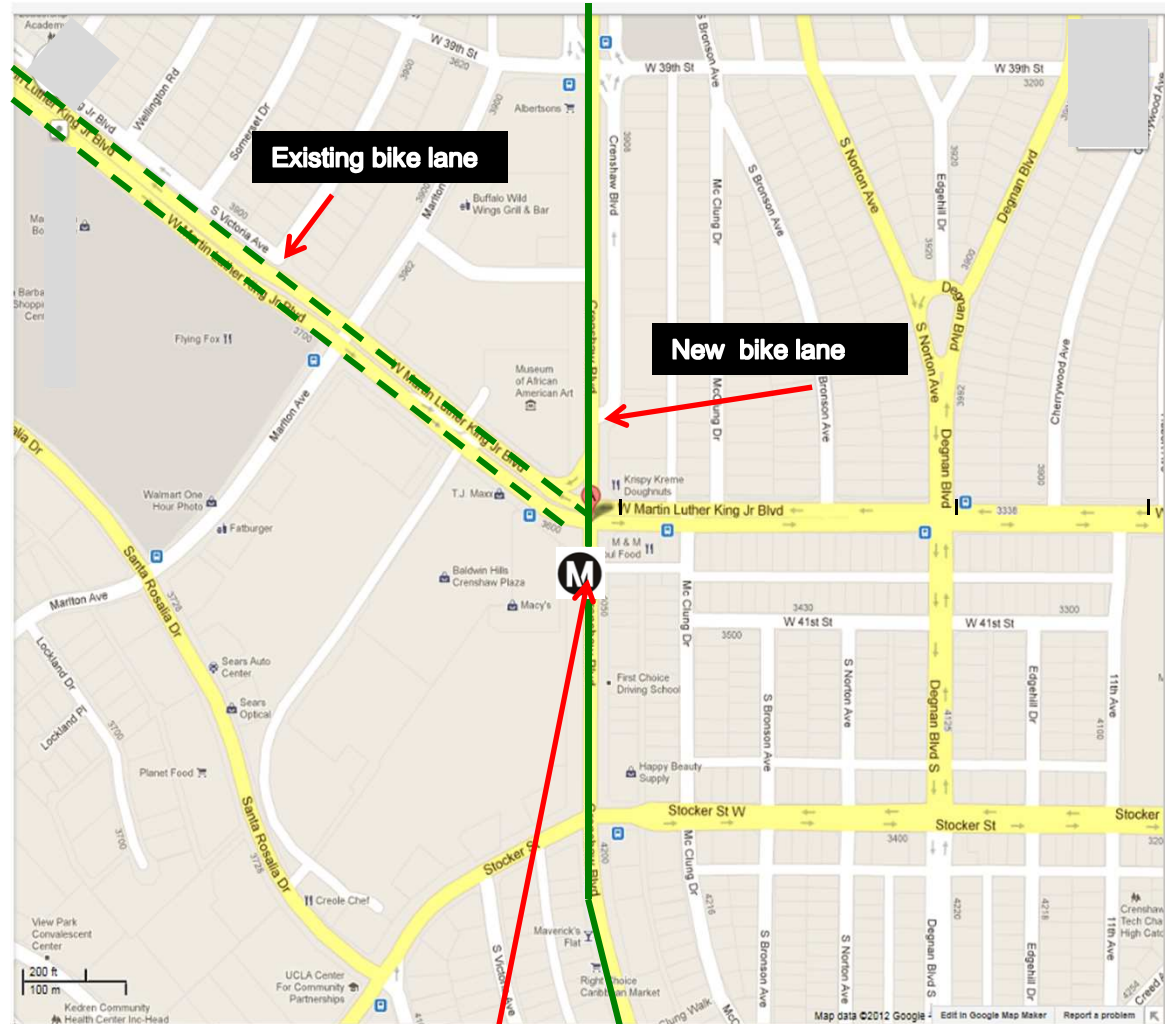
Description and Issues

Martin Luther King Jr. Boulevard is a high-volume two-lane street with a two center left turn lane west of Martin Luther King Jr. Boulevard and a two lane street with a center left turn lane east of Martin Luther king Jr. Boulevard. It averages 27,000 to 30,000 VPD and serves as a major east-west arterial connector for the Crenshaw District.

Currently, there is no bike lane on Crenshaw Boulevard. Establishing a bike lane in this area could serve to connect the activity centers including the Crenshaw Baldwin Hills Mall, numerous schools, the commercial district, and portions of Lemiert Park Village.

Recommended Improvements

- Install striped bicycle lanes on Crenshaw Boulevard with reflective white paint.
- Locate Crenshaw Bicycle Lane adjacent to the parking curb and parked cars.
- Connect the Bike Lane to the Exposition and Slauson Stations.



King Boulevard Station

Recommended Improvements

King Bike Lanes Rec. 1.2

Install bike lanes on King Blvd. east of Crenshaw Boulevard and connector streets to create a bicycle network around the King Boulevard Station.

Description and Issues

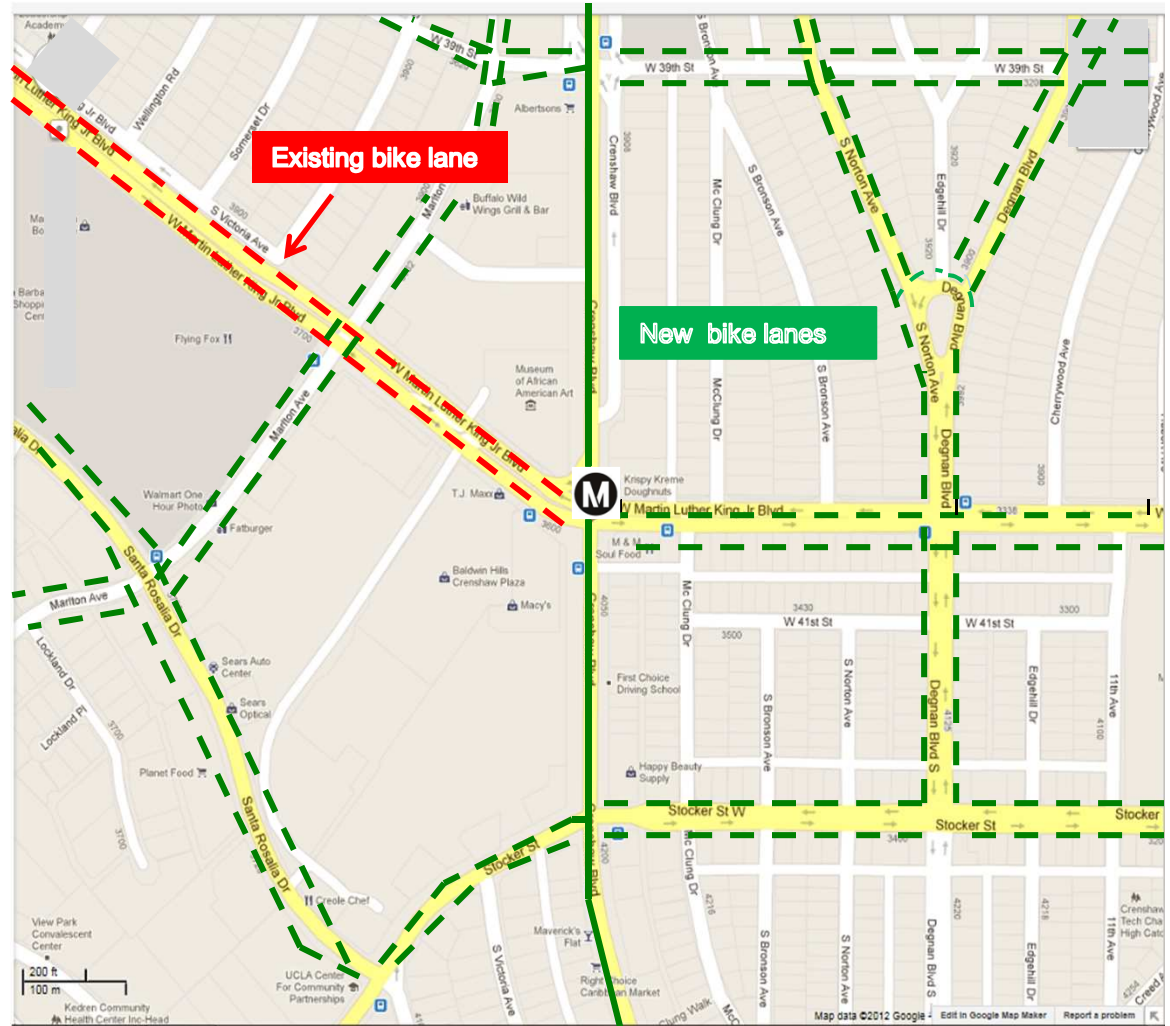
Martin Luther King Jr. Boulevard is a high-volume two-lane street with a two center left turn lane west of Martin Luther King Jr. Boulevard and a two lane street with a center left turn lane east of Martin Luther King Jr. Boulevard. It averages 27,000 to 30,000 VPD and serves as a major east-west arterial highway connector for the Crenshaw District.

Currently, there are no defined bike lanes on the eastside of Martin Luther King Jr. Boulevard after crossing Crenshaw Boulevard. The bicycle network is broken and needs to be connected with other activity centers.

Martin Luther King Jr. Boulevard as well as the other major collector roads within a 1/2-mile radius of the King Station should connect to the Crenshaw Boulevard bike lane through defined bike paths. The presence of schools on these collector roads makes the creation of bicycle lanes on these streets ideal.

Recommended Improvements

- Install striped bicycle lanes on Martin Luther King Jr. Boulevard with reflective white paint.
- Locate Martin Luther King Jr. Bicycle Lane adjacent to the parking curb next to parking lane.
- Create Bike Lanes that intersect with the Martin Luther King Jr. Boulevard bike lane along 30th St., 41st St, Degnan Blvd., and Leimert Blvd., Stocker St., Santa Rosalia Dr., and Marilton Ave. This should be coordinated with LADOT.



Looking west on King Blvd. at Degnan Blvd.

King Boulevard Station

Recommended Improvements

King Bike Lanes Rec. 1.3

Install bicycle boulevard around the perimeter of Audubon Middle School.

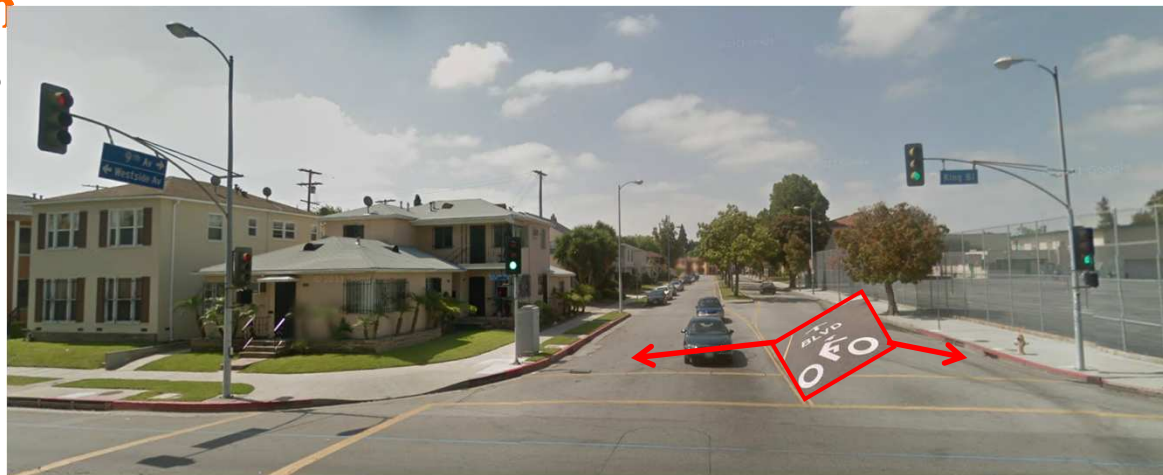
Description and Issues

Audubon Middle School is the largest school campus in the King Boulevard Station radius. It serves as a community center hosting community meetings in its auditorium, afterschool activities, athletic games on its fields, and is a voting center during elections.

A bicycle boulevard should be installed around the perimeter of Audubon Middle School. It should be located on 11th Avenue and 9th Ave. and intersect with the bike lanes on Stocker Street and King Blvd.

Recommended Improvements

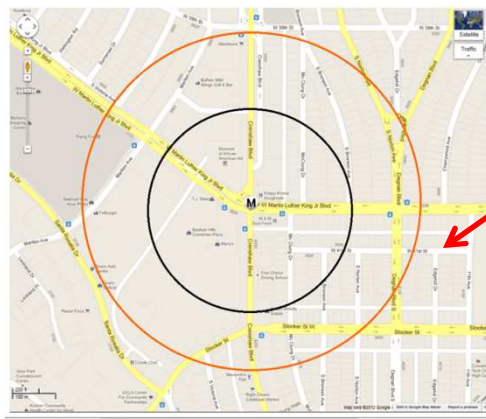
- Install striped bicycle bicycle boulevard on 11th Avenue and 9th Avenue around Audubon Middle School.



Audubon M.S. – looking south on 9th Ave. at King. Blvd



Audubon M.S. – looking south on 11th Ave. at King. Blvd



King Boulevard Station

Recommended Improvements

King Bike Lanes Rec. 1.4

Install Bicycle Box at King Blvd. and Crenshaw Avenue crosswalks to aid in the flow of bicycle traffic.

Description and Issues

Bicyclists at the intersection of King Blvd. and Crenshaw Boulevard will have to compete with fast-moving, high-volumes of traffic. They need a headstart on traffic in order to successfully navigate with the flow of motorized traffic and avoid pedestrians.

Installing a bicycle box in the right turn lane area of each crosswalk will give them a chance to move ahead of traffic when the light changes.

Bicycle boxes provide additional space for bicyclists to move to the front of the vehicular queue while waiting for a green light.

Recommended Improvements

- Install bicycle boxes at the King Blvd. and Crenshaw Boulevard intersection.
- Install Bicycle Signal to allow them to move ahead of traffic.



Crosswalk signal with bicycle light.



Install Bike Lane - Bike Box at Crenshaw and Slauson / Traffic lights should have a 4 sec. delay for cars giving Bikers time to cross

King Boulevard Station

Recommended Improvements

King Bike Signage and Wayfinding Rec. 2.1

Bike Signage and Wayfinding Signage in conjunction with new Bike Lanes.

Description and Issues

Bicycle Lanes around the King Blvd. Station area roadways should be designated for the exclusive use of bicycles. Bicycle Lane markings increase a bicyclist's confidence that motorist will not stray into their travel paths. Equally, signage makes it less likely that motorists will swerve left out of their lane to avoid bicyclists sharing the road on their right.

Wayfinding devices assist bicyclists by alerting them to connecting bike lanes, bike paths and bicycle boulevards. They also alert bicyclists to potential dangers. Wayfinding signage in the Slauson Station area should be treated like freeway signage alerting bicyclists to the direction of and distance to main boulevards, LRT stations, and activity centers.

The consistent use of street signage will create a natural rhythm that bicyclists and motorists will begin to rely upon to inform them of each other and maintain the safety of motorists and bicyclists.

Recommended Improvements

- Install consistent way finding signage.
- Create Bike Route Signage with Distance Markers.
- Place No Parking Signage at intervals along bike lanes to discourage motorist obstructing bike lanes.



King Boulevard Station

Recommended Improvements

King Bike Signage and Wayfinding Rec. 2.2

Bike Signage and Wayfinding Signage Height.

Description and Issues

Bicycle signage and wayfinding devices are typically posted for motorized vehicles to read and adjust their driving based on the presence of bicycle traffic. However, signage for bicyclists are also posted at the same level. This poses a challenge for bicyclists whose line of sight is at a different angle from motorists.

All Bicycle Lane signage around the King Blvd. Station area roadways should be posted at one standard height for motorized vehicles. Bicycle signs for bicyclists should be posted at a lower height to encourage them to use them as wayfinding and safety devices. This will also prevent them from shifting their line of sight from the road area thus preventing possible accidents..

Recommended Improvements

- Install signage for bicyclists and wayfinding devices at a height slightly lower than those designated for motorized vehicles.
- Make all bicycle signs one consistent color.
- Avoid cluttering signs together so that messaging does not compete.
- Post No Parking Signs with Bike Signage.



Avoid Visual Clutter



Bike Signage for Motorists is typically white.



Signage at Bicyclists Height
Possible consistent green color for Bicyclists.



Bike Lane Sign with No Parking Sign.



King Boulevard Station

Recommended Improvements King Bike Signage and Wayfinding Rec. 2.3

Design a Bike Route and Bike Route Signage leading from the King Blvd. Station west to the Dorsey High School / Rancho Cienega Recreation Facility and easterly to Audubon High School

Description and Issues

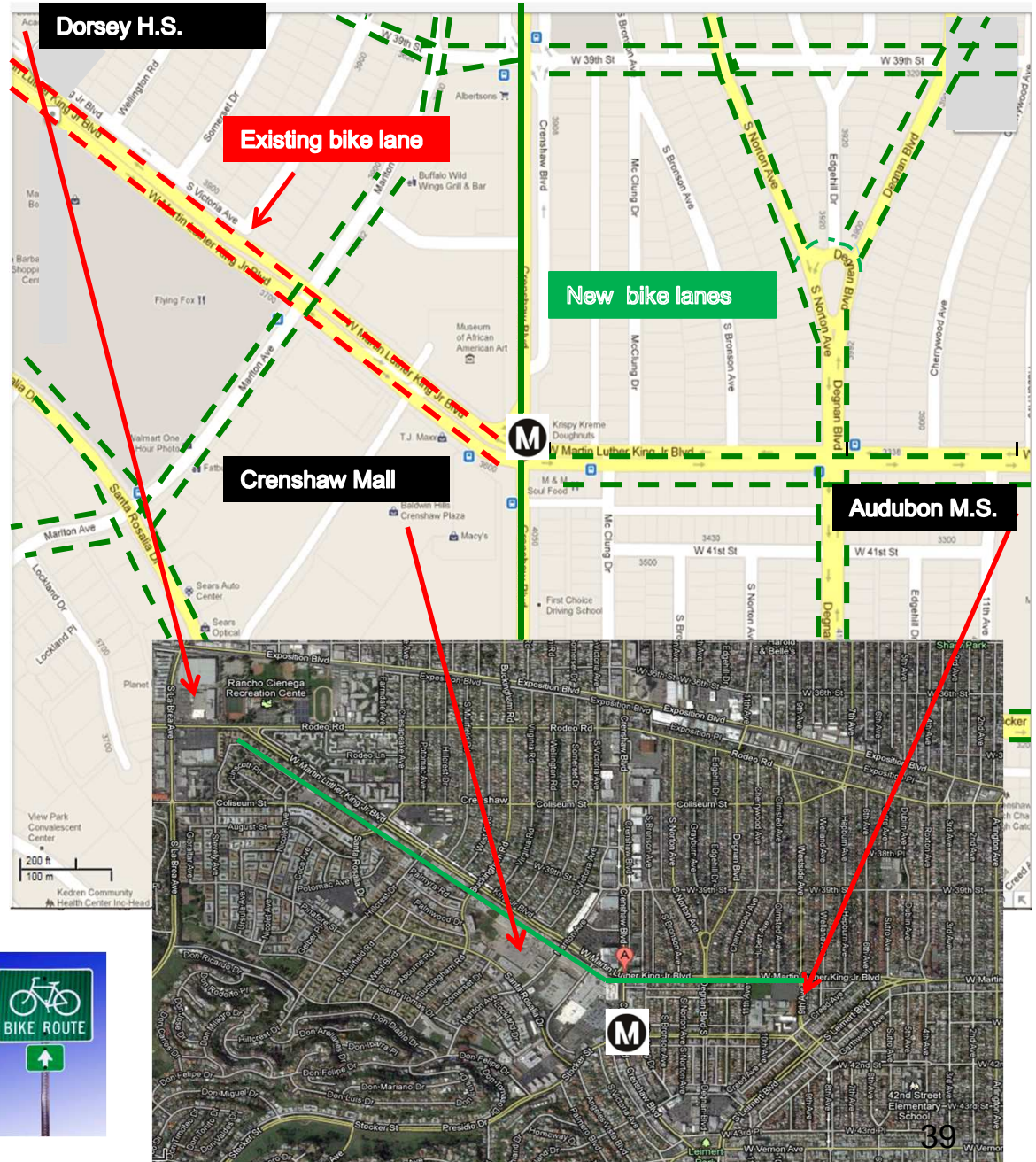
There is an existing bike lane west of Crenshaw Boulevard on King Boulevard starting at the intersection. It ends at Dorsey High School / Rancho Cienega Recreation Center. A formal Bike Route should be developed to connect the Audubon Middle School and the Crenshaw Baldwin Hills Mall with Dorsey High School and the Rancho Cienega Recreation Center. Both of these are slightly outside of the ½ mile radius, but are significant to the station.

Rancho Cienega is the site of numerous festivals including the African Marketplace and Belizean Festival. It also has a swimming pool, tennis courts and a track that are all used by the community consistently to exercise. The Baldwin Hills Mall hosts numerous music festivals, a farmer's market and the Pan African Film Festival.

Dorsey High School plays its sporting games at home. Creating a Bike Route would allow bicyclists to connect to the sight via a defined bike route with signage.

Recommended Improvements

- Install Bike Route signage for the bicyclist and at appropriate height for the motorist.
- Develop a Bike Route that connects from Audubon Middle School with the Dorsey High School and the Rancho Cienega Recreation Center.



King Boulevard Station

Recommended Improvements King Bike Storage Facilities Rec. 3.1

Create a bicycle storage facility in conjunction with the King Blvd. Station.

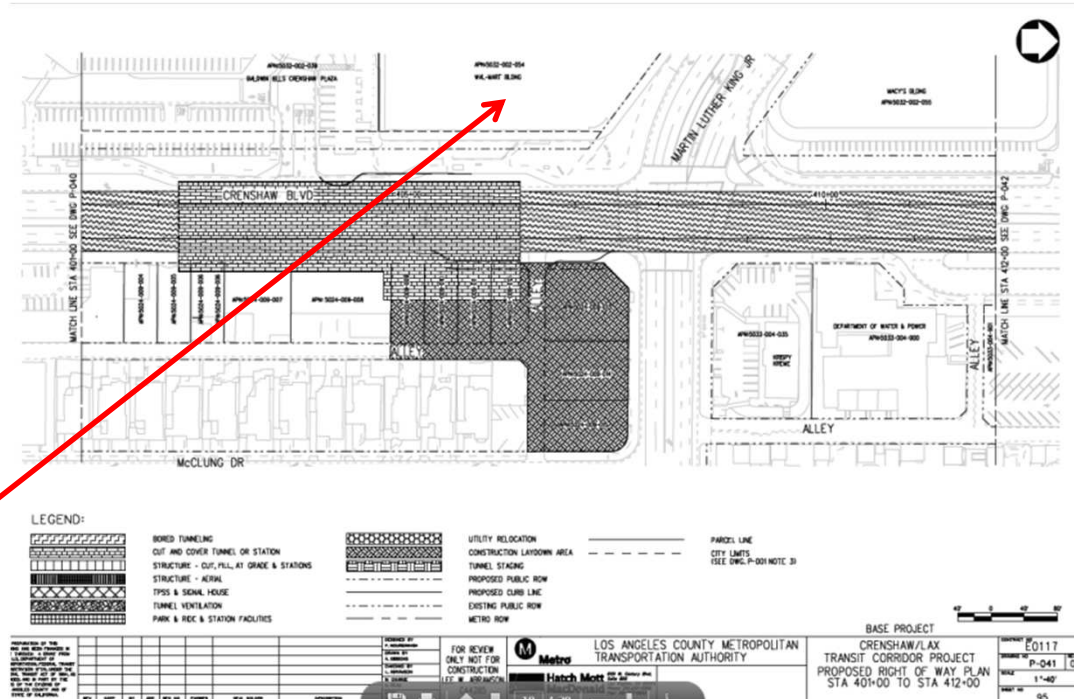
Description and Issues

There is need for bicycle storage facilities at the King Blvd. Station to accommodate bicyclists who may “Park and Ride Bikes” or “Ride Transit and Ride Bikes”.

The bicycle storage facility could be located on the proposed Park and Ride facility on the southeast corner of King Boulevard and Crenshaw Boulevard.

Recommended Improvements

- Install Bike Storage facility at Park and Ride sight or at optional station portal on west side of Crenshaw Boulevard.
- Include bicycle repair facilities.



Examples of Bike Storage Facility Equipment

King Boulevard Station

Recommended Improvements King Bike Bike Safety Rec. 4.1

Develop a Bicycle Safety campaign and place on the back of buses in the King Blvd. Station. It will also benefit other stations.

Description and Issues

Due to the tight and curving bike lanes in the King Boulevard Station area, a bike safety visual campaign should be launched to remind motorized vehicles that there are bicycles present.

An ad could be placed on the back of the local Metro buses that advises drivers to keep their distance from motorists.

A similar ad campaign could occur for bicyclists. Advising them on how to stay safe on the roads. This should be coordinated with the State Assembly's "Give Me 3" campaign. It encourages motorists to stay 3 feet from bicyclists.

Recommended Improvements

- Develop bike safety ad program that is placed on the back of local Metro Buses.
- Develop ad programs targeted motorized vehicles and bicyclists.



King Boulevard Station

Walkability / Pedestrian Intersection Rec. 1.1

Install adequate pedestrian refuge waiting areas in all crosswalks at the intersection of Crenshaw Boulevard and King Boulevard.

Description and Issues

There are numerous families, students, and seniors that use this intersection. There is also a large number of seniors and students that use the intersections on different points of the week. Large adequate pedestrian refuge areas should be installed to allow populations that cannot move across the street quickly to wait in safety for the light to turn for them to cross.

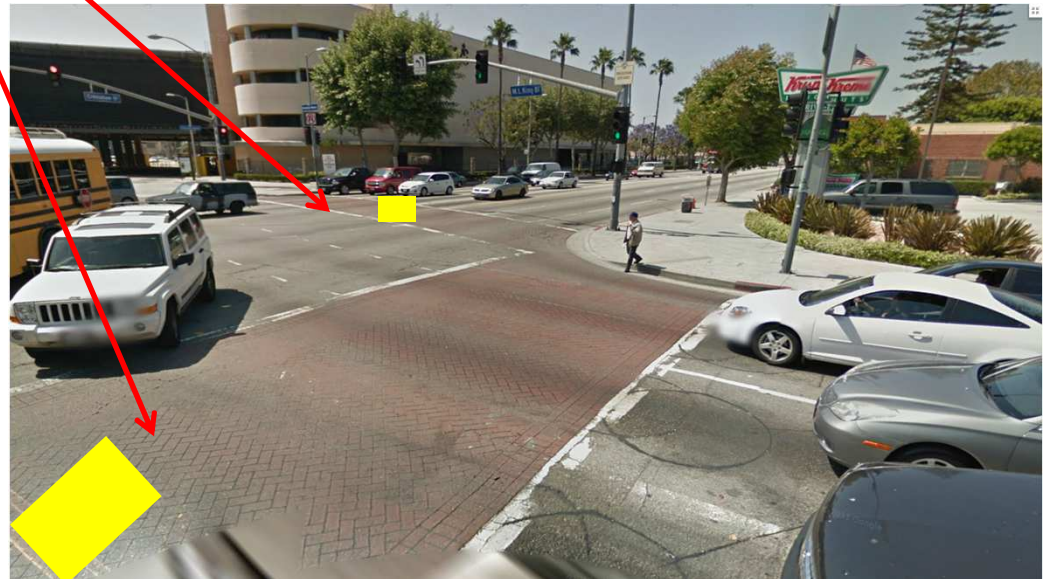
Recommended Improvements

- Install high visibility pedestrian refuge areas in the crosswalks.
- Continue to work with California Public Utilities Commission (CPUC) on safety concerns related to pedestrian refuge islands.

Before



After



King Boulevard Station

Walkability / Pedestrian Intersection Rec. 1.2

Stripe the pedestrian street markers with different reflective colors for them to stand out and guide the pedestrian.

Description and Issues

All of the street markers are white in the Crenshaw Boulevard and King Boulevard area. Crosswalks should be differentiated by color to better guide pedestrians.

Recommended Improvements

- Pedestrian crosswalks should be painted a different color.
- Stamped asphalt should be installed and maintained to cue pedestrian on where to walk safely.



Before



After



King Boulevard Station

Walkability / Pedestrian Street Furniture Rec. 2.2

Install canopy shade trees and covered bus benches to protect pedestrians from heat and sun while walking or waiting on the bus.

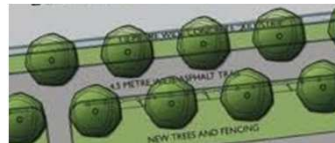
Description and Issues

There is a need for more canopy street trees at the King Blvd. Station area station.

There is also a need for covered bus benches.

Recommended Improvements

- Plant a consistent canopy of trees for shade.
- Bus shelters should be updated solar design to provide safety lighting at night.



Youth at Crenshaw Boulevard and King Blvd. – Searching for shade trees.



Existing Bus Bench on southeast corner of King Blvd and Crenshaw Blvd. An updated bus shelter should be added here that gives more space and shelter for this busy intersection. Solar / Green Power should be considered.

King Boulevard Station

Walkability / Pedestrian Walking Path Rec. 3.1 Wayfinding/Signage

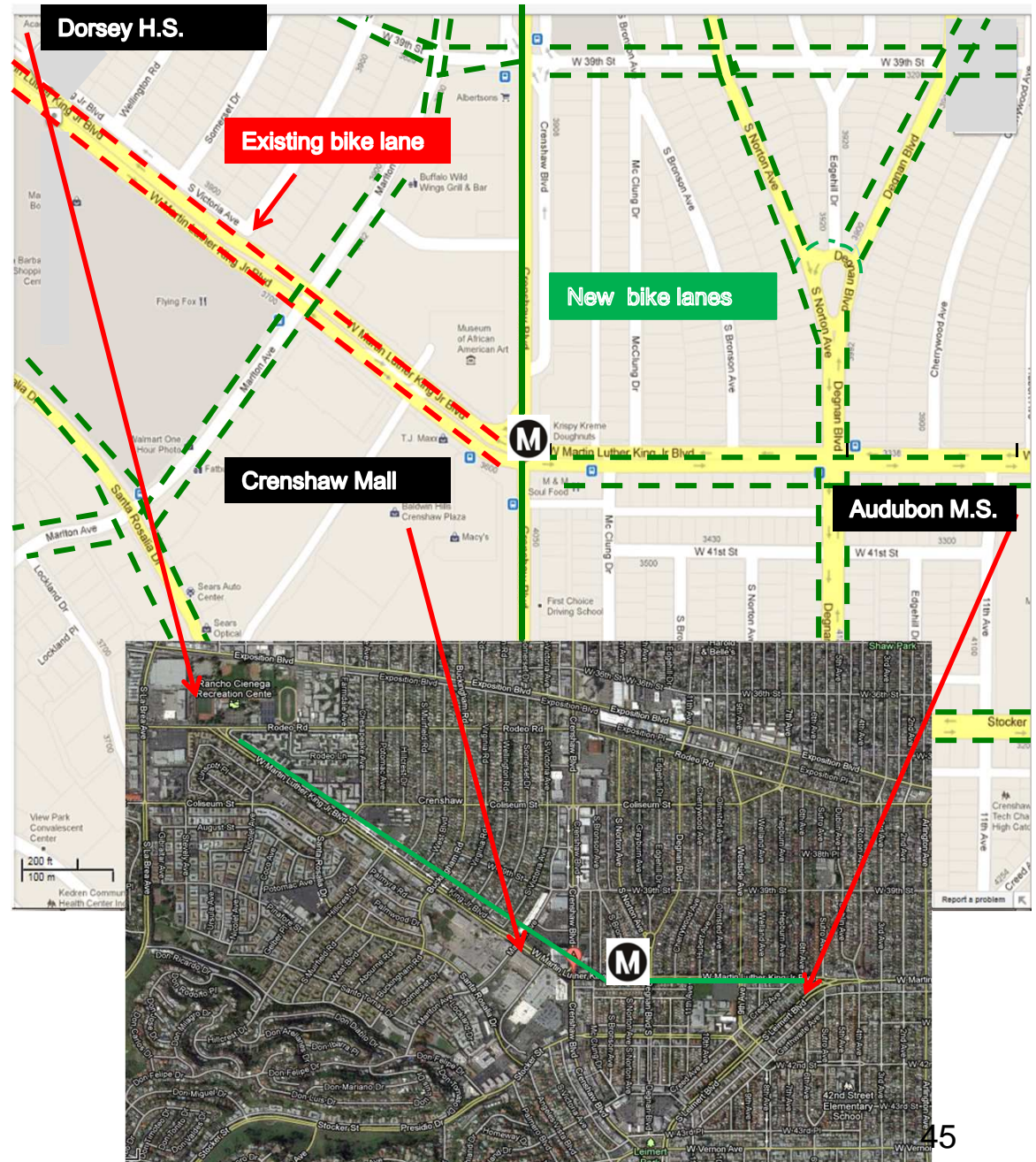
A co-located walking path should be installed with the Bike Route leading west from the King Blvd. Station terminating at Dorsey High School and the Rancho Cienega Recreation Center & easterly on King Blvd. Terminating at Audubon Middle School.

Description and Issues

A Pedestrian Walking Path should be installed to follow the Bike Route from the King Blvd. Station. This will develop a safe passage for pedestrians and bikes to navigate between activity centers.

Recommended Improvements

- Install a Pedestrian Walking Path along the same route as the Bike Route. The current sidewalk should be utilized where possible. Prop 1C funds could be used to build out the necessary infrastructure for this project. The successor to CRA-LA Prop 1C funds should be consulted.
- Install Pedestrian Walking Path Signage.



Exposition Boulevard / Crenshaw Boulevard INTERSECTION

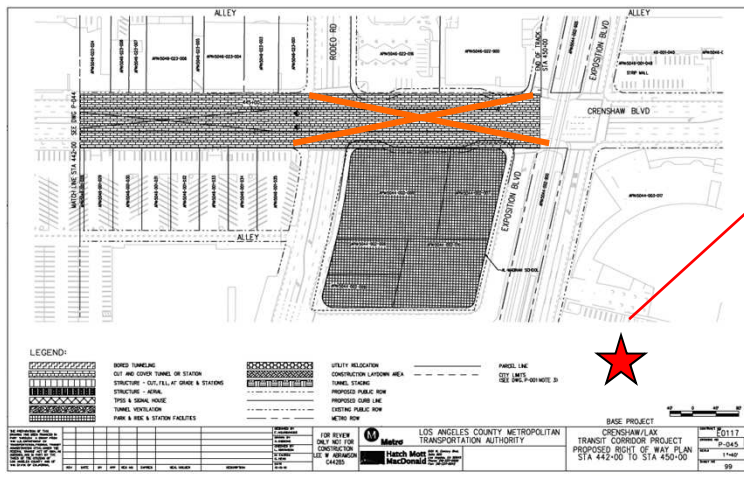


Exposition Boulevard Station

The Exposition Boulevard Station will be located below-grade in the center of Crenshaw Boulevard north of Martin Luther King Jr. Boulevard Station (see Map Below). It is 1.15 miles from the Martin Luther King Jr. Boulevard Station. The below-grade station poses several pedestrian and bicycle access issues for the intersection given its connection to the existing Expo Line.

The Exposition Station is within a medium density urban area of the Crenshaw District. There are numerous activity centers surrounding the station. Major activity centers include Los Angeles County Probation Department, West Angeles Church of God in Christ, Cren-Expo Plaza, Dental Playground, West Angeles Youth Ministry, Celebrity Nascent Charter School, Union Bank, Virginia Road School, Lula Washington Dance Theatre, Crenshaw Square, Women, Infants, and Children (WIC) Office, Harold and Belle's Restaurant. Cameo Cleaners, Ralphs Market and Rite Aid property will become part of a new retail development at the southeast corner of Rodeo Road and Crenshaw Boulevard.

Walkability and bicycle access inventory fieldwork identified constraints. For bicyclists, there are no paved bike lanes on Crenshaw Boulevard or secure bicycle facilities, a lack of height appropriate wayfinding devices, the need for reflective lane markers, and poor roadway conditions. Pedestrian concerns include lack of painted high visibility crosswalks, the need for countdown signals at intersections, more covered/lighted bus shelters, consistent street furniture, appropriate street lighting, and school crossings lack appropriate signals and crosswalk markings. There is also a need to integrate this station with the existing Expo Line Station.



Map 5 - Crenshaw / LAX LRT Line - Exposition Boulevard Station

Exposition Boulevard Station

Activity Centers

The neighborhoods within a 1/4 mile and 1/2 mile radius of the Exposition Blvd. Station is home to robust activity centers with numerous governmental, schools, shopping districts, cultural centers and non-profit organizations represented.



Union Bank



Celebrity Nascent Charter School



Virginia Road School



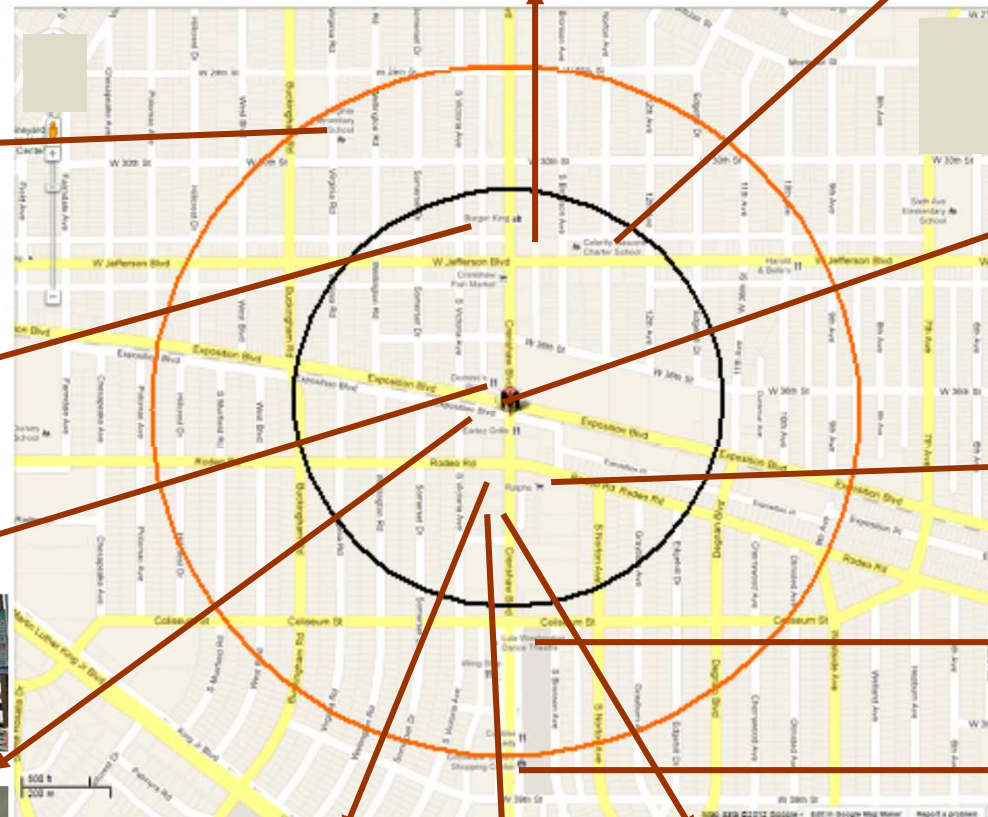
West Angeles Youth Ministry



Cren-Expo Plaza



Los Angeles County Probation Department



Dental Playground



Women, Infants,
and Children. (WIC)



Law Office of Randall &
Associates



West Angeles Church of God in
Christ



Cameo Cleaners & Ralphs
Market - Location of future
new retail development.



Exposition Boulevard Station

Recommended Improvements Exposition Bike Lanes Rec. 1.1

Bike Lanes on Exposition Boulevard and Collector Streets within the ½ mile radius of the station

Description and Issues

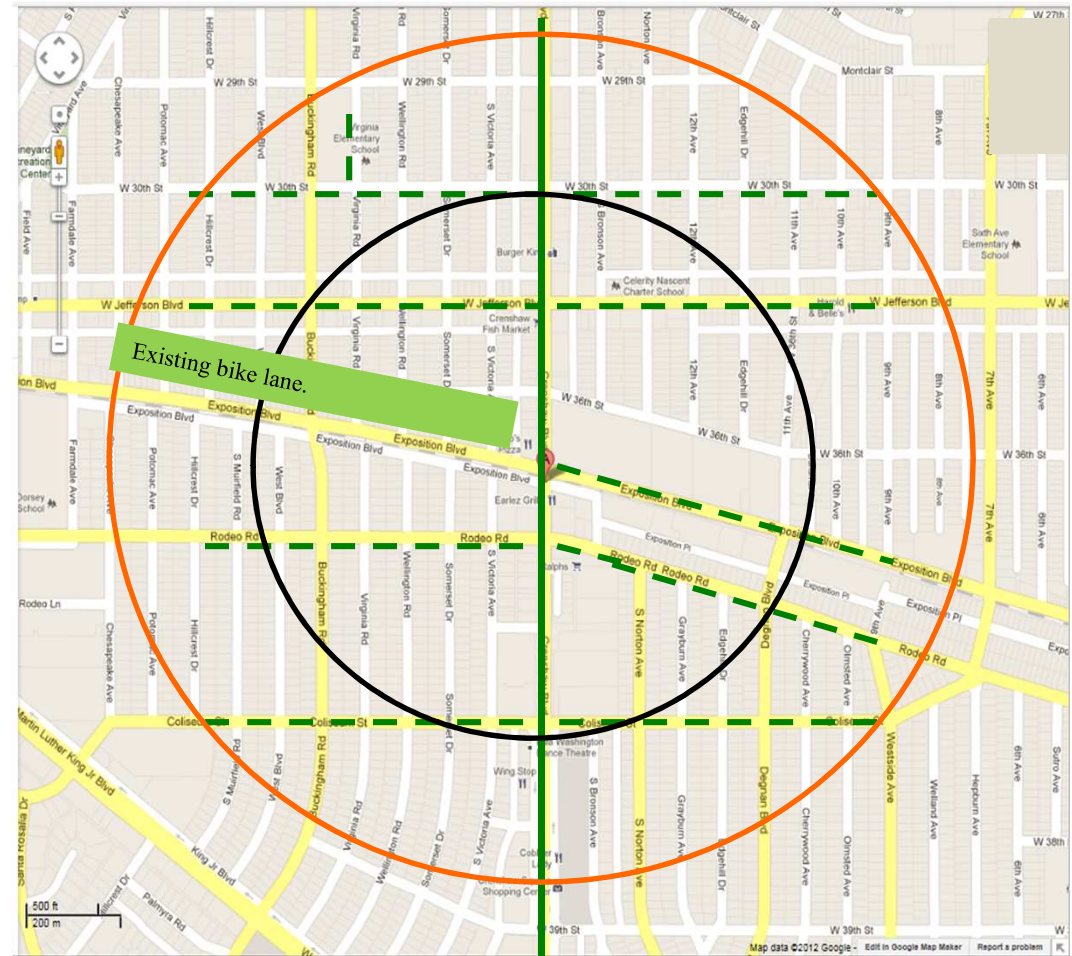
Exposition Boulevard is a high-volume One-lane street with a one center left turn lane west of Exposition Boulevard and a one lane street with a center left turn lane east of Exposition Boulevard. It averages 27,000 to 30,000 VPD and serves as a major East-West arterial highway connector for the Crenshaw District.

Currently, there is a defined bike lane on Exposition Boulevard starting at Crenshaw Boulevard (east) and continuing west along Exposition Boulevard to Rodeo Road intersection at Dorsey High School. However, the bicycle network is otherwise broken in the Exposition Station radius.

Exposition Boulevard, as well as, the other major collector roads within a 1/2-mile radius of the Exposition Station should connect to a new Crenshaw Boulevard bike lane through defined bike paths. The presence of schools, Governmental Businesses, Local Businesses on these collector roads makes the creation of bicycle lanes on these streets ideal.

Recommended Improvements

- Install striped bicycle lanes on Exposition Boulevard with reflective white paint lanes.
- Locate Exposition Bicycle Lane adjacent to the parking curb. Connect existing bike lanes to new bike lanes at Exposition Station.
- Create Bike Lanes that intersect within ½ mile radius of the Exposition Boulevard Station.
- Coordinate all improvements with LADOT



Exposition Boulevard Station

Recommended Improvements Exposition Bike Lanes Rec. 1.2

Install Bike Lanes on Crenshaw Boulevard that connect to the King Boulevard and Slauson Avenue Stations.

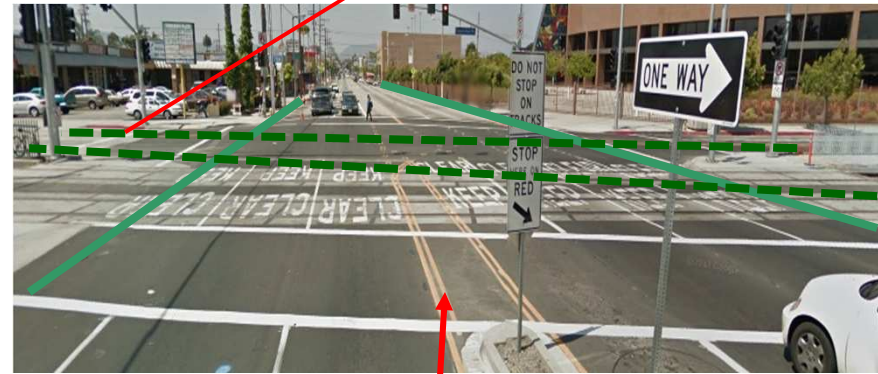
Description and Issues

Crenshaw Boulevard is a high volume, six-lane arterial street with a center left turn lane. It has an average of 36,000 vehicles per day (VPD) and serves as the primary north-south connector for traffic in the Crenshaw District. Crenshaw Boulevard serves as the major connector for the Crenshaw/LAX line with an underground LRT tunnel station platform on the south side of Exposition Boulevard at Crenshaw Boulevard. Currently, there are defined bike lanes on Exposition Boulevard however, there are no other defined bike lanes within the half-mile radius of the proposed Exposition Boulevard Station of the Crenshaw/LAX LRT Line.

Recommended Improvements

- Install striped bicycle lanes on Crenshaw Boulevard with reflective white paint lane.
- Connect existing bike lanes to new bike lanes at Exposition Boulevard Station also connect new bike lanes within ½ mile radius of the Exposition and Crenshaw /Lax line.

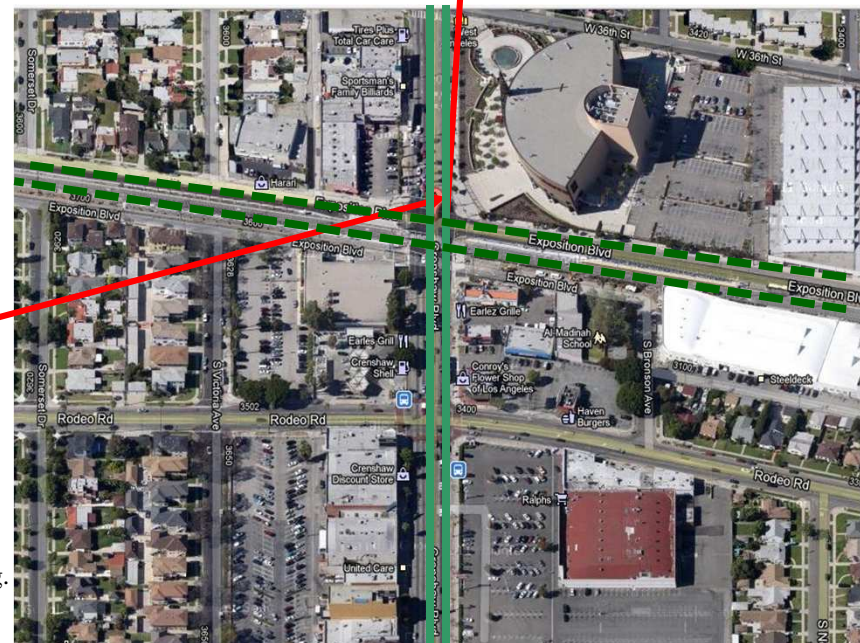
Existing Bike Lane – east/west on Exposition Boulevard



Looking north on Crenshaw Boulevard at Exposition Blvd. and Expo Line Crossing.



Looking south on Crenshaw Boulevard at Exposition Blvd. and Expo Line Crossing.



Exposition Boulevard Station

Recommended Improvements Exposition Bike Lanes Rec. 1.3

Avoid bicycle lane hazards through placing bike lanes buffers in the appropriate lane on the road.

Description and Issues

Along the Exposition Boulevard travelling west, the bike lane is a bicyclist and motorized driving hazard. The bike lane is sandwiched in between the right-turn lane and motorized traffic.

It is understood that this design is a possible solution to avoid the bike conflict with the motorized right-turn lane. However, the placement of the lane seems precarious for bicyclists who could be victim sudden motorized lane changes.

A buffer should be placed between the bicycle lane and the motorized lanes. Reflective posts could be used to create this buffer.

Recommended Improvements

- Install
- Install signage that warns motorists of bicycle traffic and reminds bicyclist to watch for motorized traffic.



Existing Bike Lane – looking west on Exposition Boulevard. Bike hazard with bike lane in center of traffic.

Solution: Place bike lane safety markers.



Exposition Boulevard Station

Recommended Improvements Exposition Bike Signage and Wayfinding Rec. 2.1

Avoid bicycle lane hazards through placing bike lanes in the appropriate lane on the road.

Description and Issues

There is an existing bike lane at the Exposition Boulevard and Crenshaw Boulevard intersection. It is located on Exposition Boulevard and flows east-west in tandem to the Expo Light Rail line right-of-way. However, there is no signage that caters to bicyclists .

Recommended Improvements

- Install signage for the bicyclist and at appropriate height for the motorist.
- Install signage that warns motorists of bicycle traffic and reminds bicyclist to watch for motorized traffic.



Existing Bike Lane – looking west on Exposition Boulevard. Bike hazard with bike lane in center of traffic. Issue: LACK OF SIGNAGE

Solution: Place bike lane SIGNAGE along the curb with safety markers.



Exposition Boulevard Station

Recommended Improvements Exposition Bike Signage and Wayfinding Rec. 2.2

Design a Bike Route and Bike Route Signage leading from the Exposition Station west to the Dorsey High School / Rancho Cienega Park and Recreation Facility.

Description and Issues

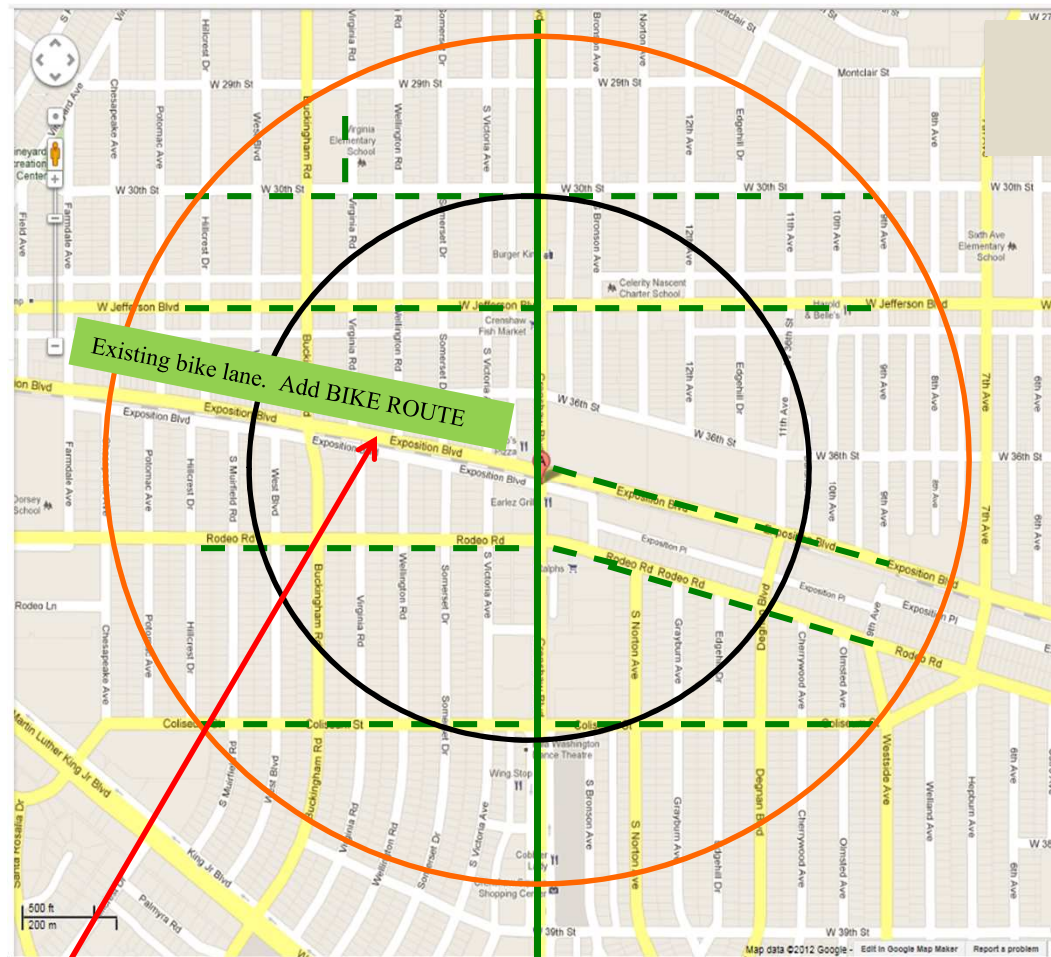
There is an existing bike lane at the Exposition Boulevard and Crenshaw Boulevard intersection. It is located on Exposition Boulevard and flows east-west in tandem to the Expo Light Rail line right-of-way. A formal Bike Route should be developed to connect the Exposition Station –Crenshaw/LAX LRT with Dorsey High School and the Rancho Cienega Park and Recreation Center. Both of these are slightly outside of the ½ mile radius, but are significant to the station.

Rancho Cienega is the site of numerous festivals including the African Marketplace and Belizean Festival. It also has a swimming pool, tennis courts and a track that are all used by the community consistently to exercise.

Dorsey High School plays its sporting games at home. Creating a Bike Route would allow bicyclists to connect to the sight via a defined bike route with signage.

Recommended Improvements

- Install Bike Route signage at eye-level for the bicyclist and at appropriate height for the motorist.
- Develop a Bike Route that connects the Exposition Station with the Dorsey High School and the Rancho Cienega Park.



Exposition Boulevard Station

Recommended Improvements Exposition Bike Storage Facilities Rec. 3.1

Create a bicycle storage facility in conjunction with the Exposition Station.

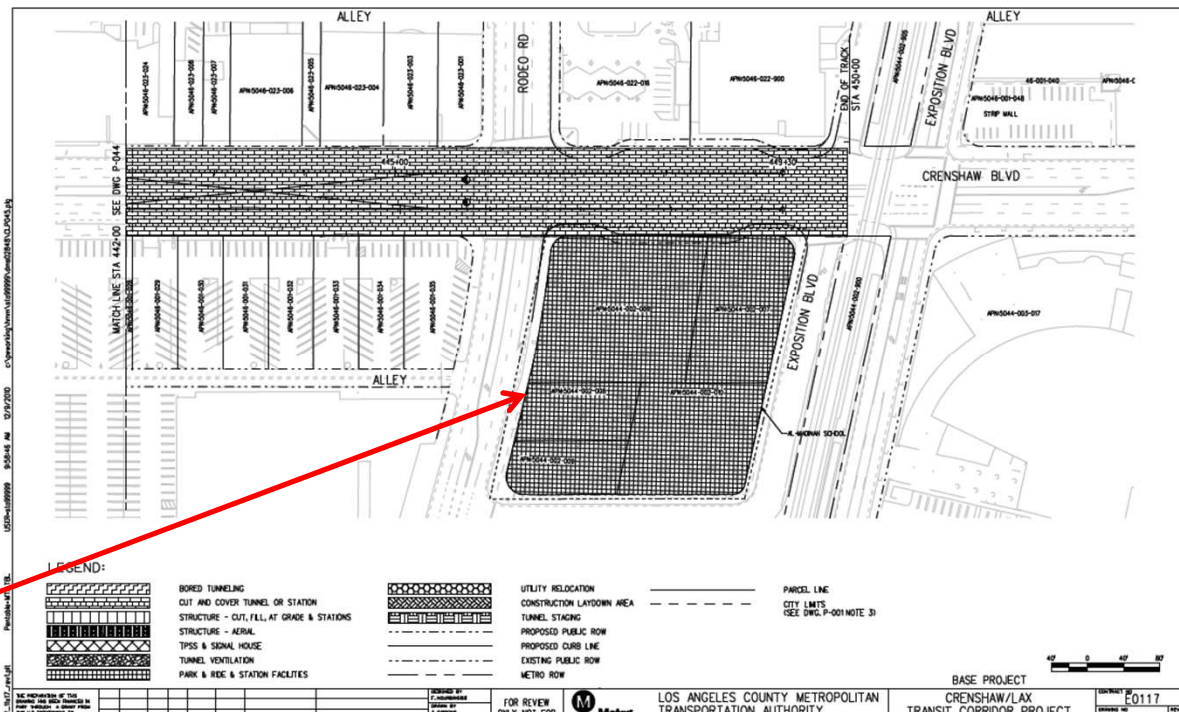
Description and Issues

There is need for bicycle storage facilities at the Exposition Station to accommodate bicyclists who may “Park and Ride Bikes” or “Ride Transit and Ride Bikes”.

The bicycle storage facility could be located on the proposed Park and Ride facility on the southeast corner of Exposition Boulevard and Crenshaw Boulevard.

Recommended Improvements

- Install Bike Storage facility at Park and Ride sight on southeast corner of Exposition Boulevard and Crenshaw Boulevard.
- Include bicycle repair facilities through negotiations with L.A. Metropolitan Transit Authority.



Examples of Bike Storage Facility Equipment

Exposition Boulevard Station

Recommended Improvements Exposition Bike Bike Safety Rec. 4.1

Develop a Bicycle Safety campaign and place on the back of buses in the Exposition Station. It will also benefit other stations.

Description and Issues

Due to the tight and curving bike lanes in the Exposition Boulevard Station area, a bike safety visual campaign should be launched to remind motorized vehicles that there are bicycles present.

An ad could be placed on the back of the local Metro buses that advises drivers to keep their distance from motorists.

A similar ad campaign could occur for bicyclists. Advising them on how to stay safe on the roads.

There is currently a “Give me 3” Campaign at the State Assembly level. The Crenshaw /LAX LRT should be one of the first places that it is implemented.

Recommended Improvements

- Develop bike safety ad program that is placed on the back of local Metro Buses.
- Develop ad programs targeted motorized vehicles and bicyclists.
- Work with California State Assembly to implement the “Give Me 3” Campaign with the Crenshaw/LAX LRT line.



Exposition Boulevard Station

Walkability / Pedestrian Intersection Rec. 1.1

Install adequate pedestrian refuge waiting areas in all crosswalks at the intersection of Crenshaw Boulevard and Exposition Boulevard.

Description and Issues

There are numerous families, students, and seniors that use this intersection. There is also a large church congregation that uses the intersections on Sundays and different points of the week. Large adequate pedestrian refuge areas should be installed to allow populations that cannot move across the street quickly to wait in safety for the light to turn for them to cross.

The California Public Utilities Commission (CPUC) should be consulted to work out concerns related to pedestrian refuge islands.

Recommended Improvements

- Install high visibility pedestrian refuge areas in the crosswalks.

Before



After



Exposition Boulevard Station

Walkability / Pedestrian Intersection Rec. 1.2

Stripe the pedestrian street markers with different reflective colors for them to stand out and guide the pedestrian.

Description and Issues

All of the street markers are white in the Crenshaw Boulevard and Exposition Boulevard area. Crosswalks should be differentiated by color to better guide pedestrians.

Recommended Improvements

- Pedestrian crosswalks should be painted a different color.
- Stamped asphalt should be installed to cue pedestrian on where to walk safely.



Before



After



Exposition Boulevard Station

Walkability / Pedestrian Street Furniture Rec. 2.2

Install canopy shade trees and covered bus benches to protect pedestrians from heat and sun while walking or waiting on the bus.

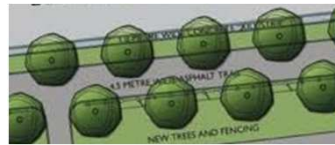
Description and Issues

There is a need for more canopy street trees at the Exposition Station area station.

There is also a need for covered bus benches.

Recommended Improvements

- Plant shade trees in a consistent pattern to create shade from their natural canopies.
- Install solar covered benches that provide shade from sun and other elements. They could also provide light at night.



Youth at Crenshaw Boulevard and Exposition – Searching for shade trees.



Youth waiting for bus – could use a covered bus bench on this hot day.

Exposition Boulevard Station

Walkability / Pedestrian Walking Path Rec. 3.1 Wayfinding/Signage

A co-located walking path should be installed with the Bike Route leading west from the Exposition Station terminating at Dorsey High School and the Rancho Cienega Park and Recreation Center.

Description and Issues

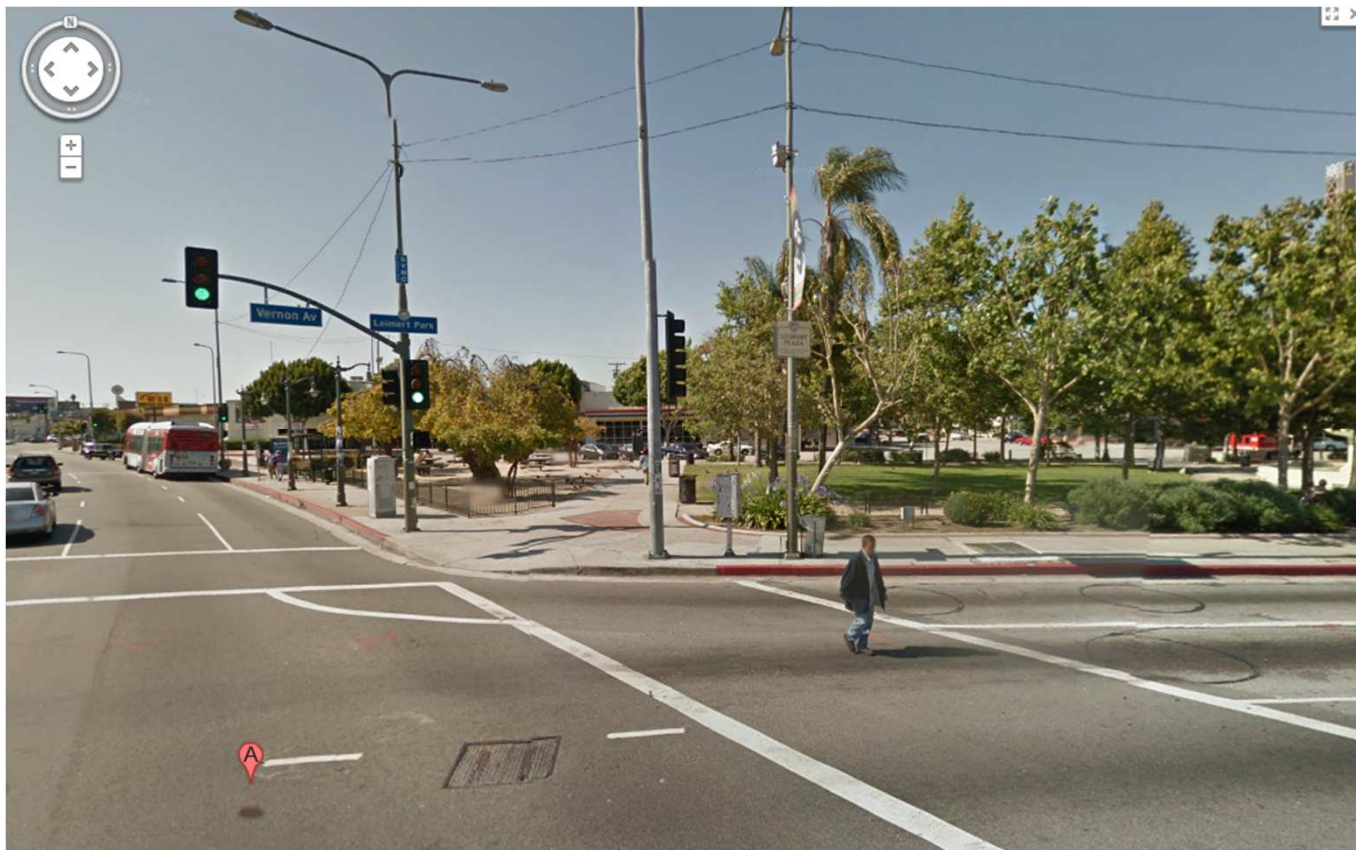
A Pedestrian Walking Path should be installed to follow the Bike Route from the Exposition Station. This will develop a safe passage for pedestrians and bikes to navigate between activity centers.

Recommended Improvements

- Install a Pedestrian Walking Path along the same route as the Bike Route.
- Install Pedestrian Walking Path Signage.



Vernon Avenue – Leimert Park / Crenshaw Boulevard INTERSECTION



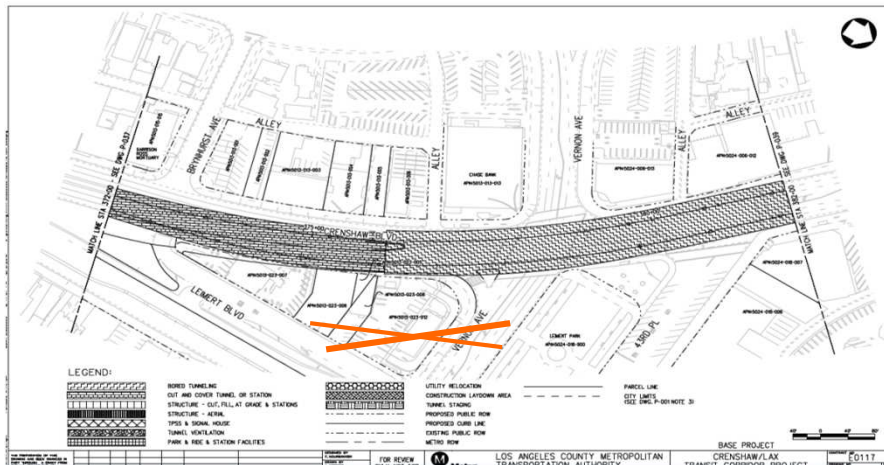
Optional Vernon Avenue – Leimert Park Station

The Slauson Avenue (Slauson) Station will be located on Crenshaw Boulevard south of King Boulevard (see Map Below). It is .6 miles from the King Boulevard Station. The below-grade station poses several pedestrian and bicycle access issues for the intersection.

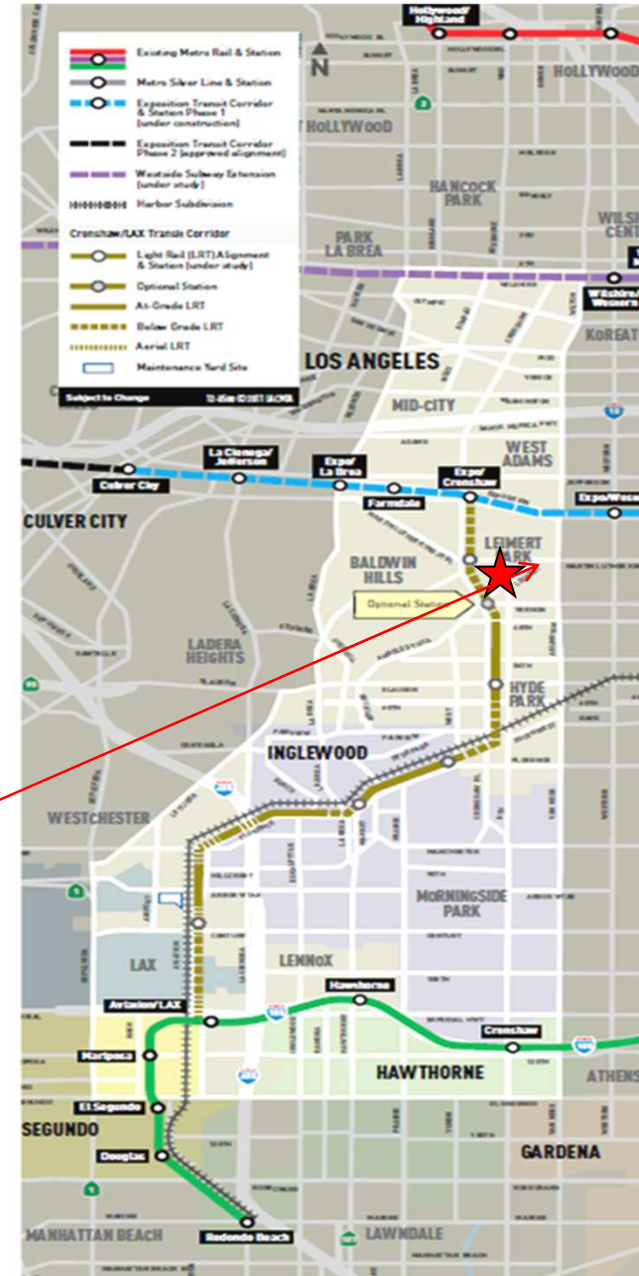
The Vernon Avenue Station is within a medium density urban area of the Crenshaw District with high density residential units. There are numerous activity centers surrounding the station. Major activity centers include Leimert Park Village, the World Stage, Babe and Rick's Jazz Club, Maverick's Flat, the Los Angeles Urban League, and numerous school and churches.

Walkability and bicycle access inventory fieldwork identified constraints. For bicyclists, there are no paved bike lanes or bicycle facilities, a lack of wayfinding devices, the need for reflective lane markers, and poor roadway conditions. Pedestrian concerns include lack of painted high visibility crosswalks, the need for countdown signals at intersections, more covered/lighted bus shelters, consistent street furniture, appropriate street lighting, and school crossings lack appropriate signals and crosswalk markings.

This is an optional station that has significant community support for build-out. The recommendations are made with this factor in mind.



Source: Final EIR Crenshaw LAX Line - Part 3 of 7 Engineering Drawings



Map 6-Crenshaw / LAX LRT Line –
Vernon Avenue – Leimert Park Station

Activity Centers



Leimert Park Commercial District

Large Apartment Community



Los Angeles Urban League



Jazz Corridor



OPTIONAL Vernon Avenue – Leimert Park Station Bike Lanes

Bike Lanes and Bike Routes should be installed to connect Leimert Park Village with surrounding activity centers including the Baldwin Hills Crenshaw Mall and surrounding schools.

Description and Issues

There is currently no consistent bike lane on Crenshaw Boulevard. One of the impediments is the jog of the street as it widens and narrows. Taking out street parking along the commercial corridor is not the most viable option as many of the small business customers consistently use the street parking to park and access businesses conveniently. However, there needs to be a defined bike lane as bicyclists use the sidewalk as a default bike lane thus endangering pedestrians.

Recommended Improvements

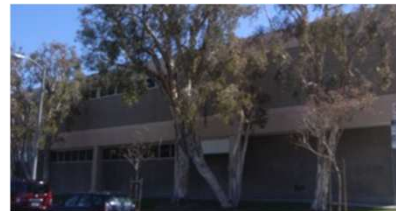
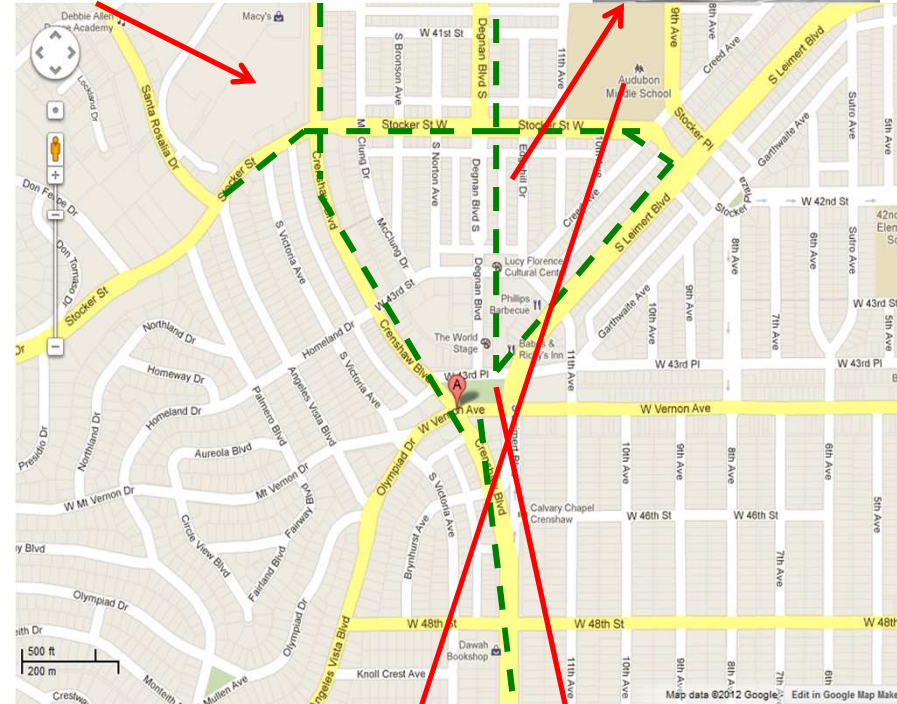
Bike Lane 1.1 – Install bike lane on Crenshaw Boulevard between the optional Vernon Station and the Slauson and Exposition stations.

Bike Lane 1.2 – Create bike lanes on connector streets with Degnan Blvd. as a Bicycle Boulevard.

Bike Lane 1.3 – Create bike lanes connecting Leimert Park Village to Crenshaw Baldwin Hills Mall.

Bike Lane 1.4 – Create Bike Route around Leimert Park Village. Vernon Avenue south; King Blvd. north; Leimert Blvd. east; Crenshaw Blvd. west. New circulation pattern for exercising and cycling.

Bike Lane 1.5 – Create a Bike Route connecting 42nd Street School, Tom Bradley Elementary, Audubon Middle School, and Crenshaw H.S.



Audubon Middle School



OPTIONAL Vernon Avenue – Leimert Park Station Wayfinding

Wayfinding devices for pedestrians and bicyclists should be installed to connect with the bike lanes to be installed. This will allow pedestrians the option to walk or ride their bikes following the circuit of sidewalks around the station.

Description and Issues

Pedestrians and bicyclists lack signage to direct them to the activity centers around the Leimert Park Station. Consistent Wayfinding Devices would also help visitors locate all of the historical / cultural assets in Leimert Park Village.

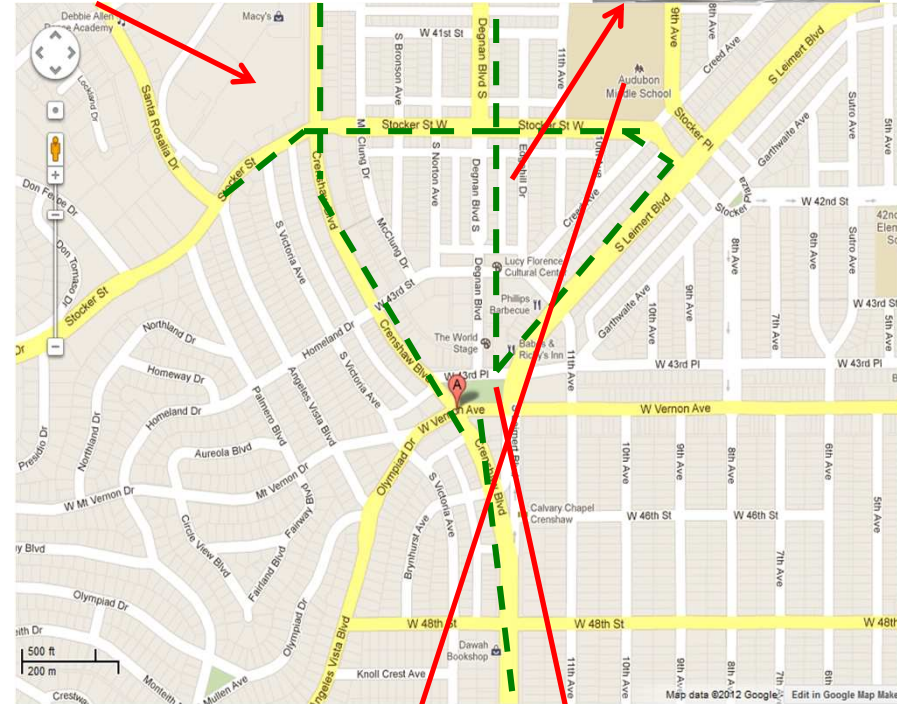
Recommended Improvements

Wayfinding 2.1 – Create a wayfinding system using signage and distance markers.

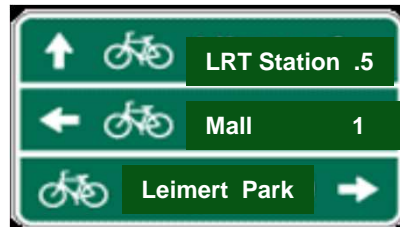
Wayfinding 2.2 – Make more school signage and make it prominent.

Wayfinding 2.3 – Add Historic/Cultural Signage like in Downtown L.A.

Wayfinding 2.4 – Add Historic/Cultural map in station area.



Audubon Middle School

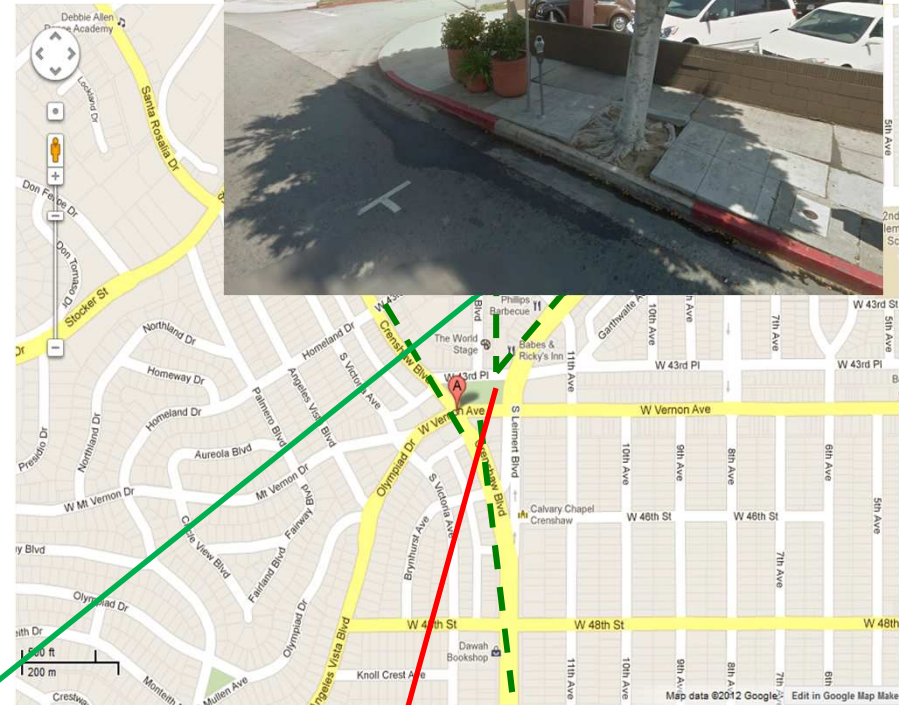


Pedestrian Intersection Improvements for Walkability

Description and Issues

Recommended Improvements

Pedestrian Intersection 1.5 – Create stamped asphalt crosswalks.



OPTIONAL Vernon Avenue – Leimert Park Station

Converting DASH Bus with Advertising Wrap
to look like Historic Trolley Car

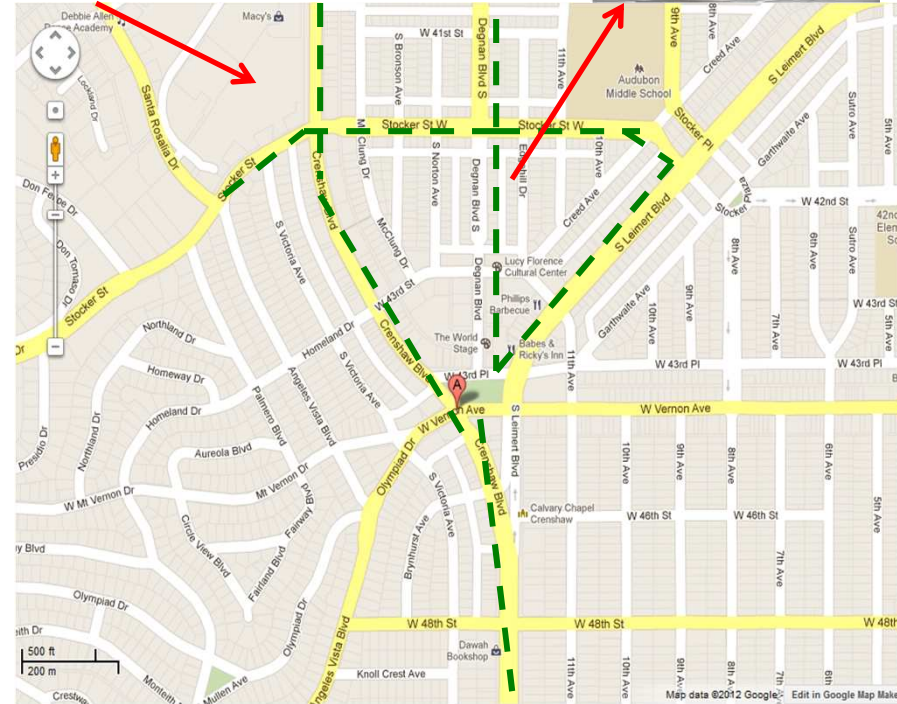
If the Vernon Avenue Station is not approved, a way to honor the cultural significance of Leimert Park Village is to redesign the current DASH bus with an advertising skin to mimic the old “V” car line that ran down Leimert Boulevard to Vernon Avenue (“V”). The DASH could also feature historic advertisements that educate riders on the transit history and the current cultural significance of Leimert Park Village to African Americans. This could be an added enhancement to the Crenshaw/LAX Line and provide a way for King Boulevard LRT riders to quickly transport to Leimert Park while feeling like they are in an important part of Los Angeles.

Description and Issues

The current advertising wraps used to completely cover a bus could be used to convert the current Leimert Park DASH bus into a historic “V” car trolley with a smooth yellow skin and green windows. This would add to the historic and cultural significance of Leimert Park Village. It would also connect the Crenshaw community to the transit history of Los Angeles, in general.

Recommended Improvements

Convert DASH bus into historic trolley look using advertising “skin” wrap all over the bus to mimic the former “V” car line.
The bus route should match the bike/pedestrian route to activity centers in the station area.



McDonald's all over skin wrap advertisement on bus.

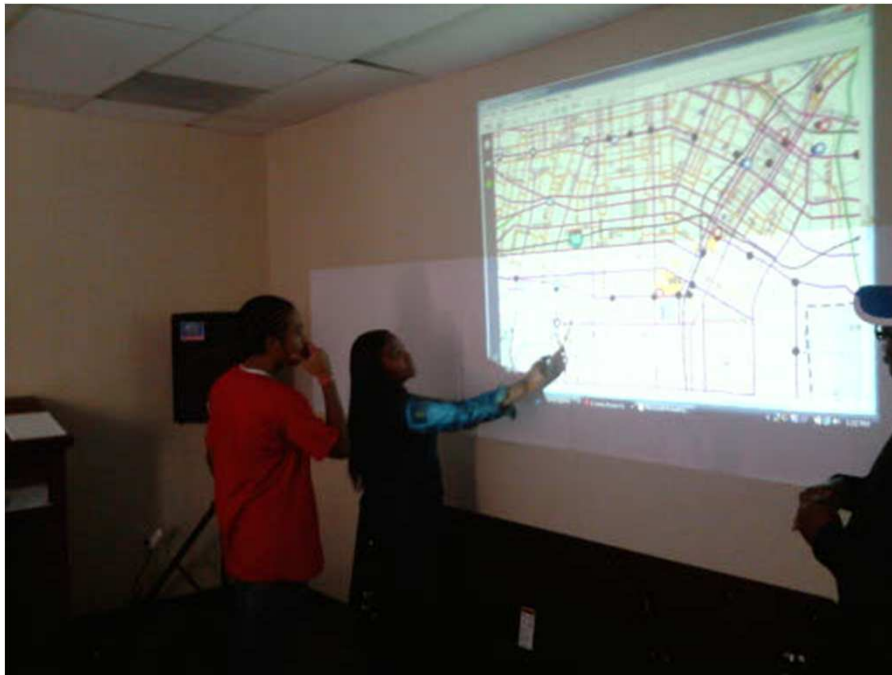


Regular LADOT DASH Bus



Historic “V” Car Trolley Line on Leimert Boulevard

APPENDIX



SAMPLE SURVEY

Bike Access, Walkability

20 Surveys Given

How many rides the....

1. Bus: 15
2. Bike: 5
3. Walk: 17
4. Train: 4
5. Car: 17

Bus Questions

A1. Cleaness of the bus:

- 5:
4:
3: 7
2: 4
1: 5

A2 Waiting for the bus:

- 10 mins. 4
15 mins. 4
20 mins. 6
25 mins. 6
30 mins. 5
35+ mins.

(most people ever waited was up till 45 mins.)

A3 How often do you ride:

- 7: 5
6:
5: 6
4:
3:
2:
1: 5

A4 do you feel safe taking the bus:

- Yes: 6 (because the people) ✓
No: 4 (not as much violence or gangs) ✓
Somewhat: 2

A5 Noticeable signs:

- Yes: 6
No: 1
Not really: 2

Bike Questions

B1 Bike lanes(on streets they take)

- Yes: 4
No: 1

B2 When do you ride your bike?

Not often, Here and There ✓

B3 Clean Streets/ sidewalks

Not really ✓

B4 Do you feel conflicted riding your bike on the sidewalk although it's illegal:

- Yes: 2
No: 1

Walking Questions

C1 Clean streets:

- Yes: 2
No: 10
Some: 5

C2 Wide enough Streets:

- Yes: 14
No: 5

C3 How long it takes to get to your destination:

- 5 mins. 1
10 mins. 4
15 mins. 1
20 mins. 4
25 mins. 1
30 mins. 4
40 mins.
45 mins. 1

C4 Safe walking at night as if in the morning:

- Safe: 1 (because of the people) ✓
Not safe: 1

Train Questions

D1 How often do you ride the train:

- Very often: 4
Not often: 5

D2 Noticeable signs:

- Yes: 7
No: 2

D3 Ride aboveground, underground, or both

- Above: 3
Under: 1
Both: 5

D4 How long does it take to get to your destination

- 5 mins. 1
10 mins. 5
15 mins. 1
20 mins.
25 mins.
30 mins. 1

Car Questions

E1 Do you or someone else drive

- Someone else: 12
Themselves: 4
Both: 1

E2 Notice department stores and businesses

- Yes: 16
No:
Not really: 1

E3 How long it takes to get to your destination

- 10 mins. 5
15 mins. 5
20 mins. 1
25 mins. 2
30 mins. 8
1-2 hrs. 1

E4 Traffic (bad)

- Yes: 7
No: 2
Not really: 5
Depends on the time: 3

Crenshaw Corridor Transit Linkage Project Survey Form

CRENSHAW CORRIDOR TRANSIT LINKAGE PROJECT Walkability Study

Name of Data Collector: _____

Date of Data Collection: _____

Transit Intersection (check one): _____ Crenshaw/Slauson
 _____ Crenshaw/Leimert Park _____ Crenshaw/King
 _____ Crenshaw/Exposition

Subject Area (check one): _____ Users _____ Amenities/Street Furniture
 _____ Schools/Libraries/Recreation _____ Activity Nodes
 _____ Transit Links

_____ Commercial Built Environment _____
 Housing Built Environment _____ Landmarks _____ Design _____
 Other: _____

DATA SECTION

Field Notes

Instructions: Note your observations in this section. For example, list the type of street furniture or describe what you see in brief detail or describe people/users. Your field notes are based on the Subject Area checked above. If this area fills up, then continue on a separate sheet of paper.

CRENSHAW CORRIDOR TRANSIT LINKAGE PROJECT DRAWINGS AND MAPPING

Instructions: Draw any items or map the built environment of your subject area. Also, use this area to draw intersections and note key data items. Continue on a separate sheet of paper, if you fill in this space completely. Include a Legend Box of Key Symbols. List any pictures you take in numerical order.

_____ North Arrow. Note which direction is North here.

CRENSHAW CORRIDOR TRANSIT LINKAGE PROJECT Bike Access Plan Study

Name of Data Collector: _____

Date of Data Collection: _____

Transit Intersection (check one): _____ Crenshaw/Slauson
 _____ Crenshaw/Leimert Park _____ Crenshaw/King
 _____ Crenshaw/Exposition

DATA SECTION

Field Notes

Instructions:

Note your observations in this section. For example, list the type of bicycle street furniture or describe what you see in brief detail or describe people/users. Also, note items that do not exist that would enhance bike access.

Interview Data should be written here.

If this area fills up, then continue on a separate sheet of paper.

CRENSHAW CORRIDOR TRANSIT LINKAGE PROJECT Bike Access Plan Study

DRAWINGS AND MAPPING

Instructions: Draw any items or map the built environment of your subject area. Also, use this area to draw intersections and note key data items. Continue on a separate sheet of paper, if you fill in this space completely. Include a Legend Box of Key Symbols. List any pictures you take in numerical order.

_____ North Arrow. Note which direction is North here.

Bike Access Survey Findings

- Lack of Bike Lanes.
- Existing Bike Lanes not connected.
- Lack of Bike Safety and Wayfinding Signage.
- Signage not at eye-level for bicyclists.
- Need for buffer zones for bicyclists to protect from motorized vehicles.
- No bike facilities to park or repair bikes.

Walkability / Pedestrian Access Findings

- Crosswalks not clearly marked.
- Sidewalks broken in some areas with tree root growing up.
- Lack of safety lights in crosswalks.
- Dirth of wayfinding signage for pedestrians.
- Need for shade trees and shaded seating.
- Need for better lighting at night.

Youth Leaders

Crenshaw Corridor Transit Linkage Project

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